

Master thesis in business administration, 15 University Credit Points (15 ECTS) Spring 2009



Difficulties of Collaboration for Innovation

- A Study in the Öresund Region

Authors: Advisor:

Adam Lindmark Leif Edvinsson Elof Sturesson

Markus Nilsson-Roos

Acknowledgement

The process of writing this thesis has been an interesting ten week journey. This thesis will be a foundation for a consultancy report for Capgemini Malmoe, Sweden on solutions to innovation collaborative problems. On our way to a finished thesis we have met, talked, interviewed and e-mail corresponded with several people who have given us inspiration, useful thoughts, theories and quidance along the way.

Thank you, Leif Edvinsson, advisor and inspirational mentor at Lund University, school of management and economics for your guiding and inspiration. Thank you, Matthias Scholander and Erik Kayser at Capgemini for giving us the privilege of conducting this thesis and report with both of you and for your support along the way. Verna Allee, we truly appreciate that you took the time letting us interview you over Skype during your time in Paris. You gave us much inspiration and very interesting perspectives. Thank you, Carin Daal at Region Skåne for sharing your thoughts and material on the subject and for the invitation to the "Innovationskraft Skåne" meeting. Thank you, Evy Lundgren-Åkerlund at Lund Bio incubator, Micael Gustafsson at Öresund IT and Bodil Rosvall-Jönsson at MINC for your input in our group interview. Thank you, Martin Lindholm at E.ON – Climate and Renewable, you gave us more knowledge on the private sector perspective on Collaboration for innovation which complemented our other material. Thank you, Charles Edquist at CIRCLE for your inspirational thoughts in the first phase of our study. Last but not least, thank you to all 162 respondents who participated in the web survey, the result gave us a rich material which we could not be without in order to conduct this study.

Collaboration for innovation - Happy reading.

Adam Lindmark
Markus Nilsson-Roos
Elof Sturesson

Summary in English

Title: Difficulties of Collaboration for Innovation

- A study in the Öresund region

Seminar date: June 5 2009

Course: Master thesis in Business administration, 15 University Credit

Points (15 ECTS), Strategic Management

Authors: Adam Lindmark

Markus Nilsson-Roos

Elof Sturesson

Advisors: Leif Edvinsson

Key words: Innovation, Collaboration, Difficulties, the Öresund region,

Meeting places

Purpose: The Purpose with this thesis is to study the difficulties of

collaboration for innovation in the Öresund region and consider

the region's impact on collaboration for innovation.

Methodology: The thesis has been executed with an abductive approach. The

data collection has been done by semi-structured interviews

and a web survey.

Theoretical perspectives: The theoretical perspectives in this thesis are theories of

collaboration for innovation and theories on how organizations

within a region can collaborate

Empiric foundation: The gathered empiric material from the web survey includes 49

companies within the Öresund region. We have executed four interviews with 6 persons with knowledge about innovation,

the Öresund region and collaboration.

Conclusions: The difficulties of collaboration for innovation in the Öresund

region are; trust issues, culture differences, lack of meeting places, lack of financiers for start-ups and the ability to identify the crucial roles and supportive networks. We have also seen that financial tools impede collaboration. The region's impact is of a structural nature. We have developed a model called

Collaboration-Helix Model.

Sammanfattning

Examensarbetets titel: Difficulties of Collaboration for innovation

- A study in the Öresund region

Seminariedatum: 5 juni 2009

Ämne/Kurs: FekP01 Strategic Management, Examensarbete 15 HP

Författare: Adam Lindmark

Markus Nilsson-Roos

Elof Sturesson

Handledare: Leif Edvinsson

Nyckelord: Innovation, Collaboration, Difficulties, Öresundsregionen,

Meeting places

Syfte: Syftet med uppsatsen är att studera svårigheter med

samverkan för innovation i Öresundsregionen samt behandla

den regionala påverkan på samverkan för innovation.

Metod: Uppsatsen har genomförts med en abduktiv forskningsmetod.

Datainsamlingen har skett genom semi-strukturerade intervjuer

och genom en webb-enkät.

Teoretiska perspektiv: Det teoretiska perspektivet som behandlas i uppsatsen är

teorier kring samarbete för innovation och teori om hur

organisationer i en region kan samverka.

Empiri: Empirin som samlats in genom webb-enkäten har varit ifrån 49

företag verksamma i Öresundsregionen. Vi har genomfört fyra intervjuer med 6 personer som har kunskap om innovation,

Öresundsregionen och samverkan.

Slutsatser: Svårigheterna med samarbete för innovation i

Öresundsregionen är förtroende problem, kulturella skillnader, brist på mötesplatser, brist på finansiärer för nystartade företag samt förmågan att identifiera de viktiga rollerna och stödjande nätverk. Vi har också sett att finansiella instrument hindrar samverkan för större företag. Regionens påverkan är av strukturell karaktär. Vi har utvecklat en modell, Collaboration-

Helix Model.

Table of Content

Definitions		8 -
Abbreviations	S	9 -
1. Introductio	n	10 -
1.1 Backgro	ound	10 -
1.2 Problen	n discussion	11 -
1.3 Researc	ch questions	12 -
1.4 Purpose	<u> </u>	12 -
1.5 Delimita	ation	12 -
1.6 Structui	ral mind-map	13 -
2. Methodolo	gy for studying collaboration for innovation	14 -
2.1 Researc	ch approach	14 -
2.2 Data co	llection	14 -
2.2.1 We	eb survey	15 -
2.2.2 Sele	ecting the respondents for the web survey	15 -
2.2.3 Inte	erviews	16 -
2.2.4 Inte	erview respondents	16 -
2.3 Credibil	lity of the study	17 -
2.3.1 Val	idity	17 -
2.3.2 Rel	iability	17 -
2.3.3 Rep	oresentativity	18 -
2.4 Sources	s and data collection	18 -
3. Theories or	n collaboration for innovation within a region	20 -
3.1 Blue Oc	ean Strategy	20 -
3.2 Innovat	ion Killers	21 -
3.3 Triple H	lelix and Penta Helix	22 -
3.4 Capitals	s within a region	24 -
3.4.1 Inte	ellectual and Social Capital	25 -
3.4.2 Tec	chnical Capital	25 -
3.4.3 Fina	ancial Capital	25 -
3.4.4 Cul	tural and Leisure Capital	25 -

3.4.5 Environmental Capital 26	-
3.4.6 Democratic Capital 26	-
3.4.7 ICT Capital 27	-
3.5 Being innovative in the knowledge economy 28	-
3.6 Collaboration for innovation in companies 29	-
3.7 Difficulties with collaboration 32	-
3.8 Value networks 34	-
3.9 Summarizing theoretical model 36	-
4. Empirics about regional problems in Öresund 37	-
4.1 The Öresund region 37	-
4.1.1 Culture 39	-
4.1.2 Infrastructure - 39	-
4.1.3 Education 40	-
4.1.4 Work life balance 40	-
4.1.5 The public sector on the Swedish side of the region 40	-
4.2 Analysis of the regional problems 41	-
4.2.1 The Öresund Region from an Intellectual- & Social Capital perspective 41	-
4.2.2 The Region from a Technical Capital perspective 42	-
4.2.3 The Öresund Region from a Financial Capital Perspective 43	-
4.2.4 The Öresund Region from a Culture- and Leisure Capital Perspective 43	-
4.2.5 The Öresund Region from an Environmental Capital perspective 45	-
4.2.6 The Öresund Region from a Democratic Capital perspective 45	-
4.2.7 Concluding remarks of the region 45	-
5. Corporate related problems 47	-
5.1 Management related problems 47	-
5.1.1 Change management 47	-
5.1.1.1 Analysis of change management 47	-
5.1.2 Undefined strategy 48	-
5.1.2.1 Analysis of undefined strategy 50	-
5.1.3 Lack of managerial competence 51	-
5.1.3.1 Analysis of managerial competence 51	-

5.1.4 Stakeholder management	- 52 -
5.1.4.1 Analysis of stakeholder management	- 53 -
5.1.5 Legal issues	- 55 -
5.1.5.1 Analysis of legal issues	- 55 -
5.2 Trust related problems	- 55 -
5.2.1 Analysis of trust related problems	- 56 -
5.3 Problems with different objectives	- 58 -
5.3.1 Contradictive objectives between universities and the private sector	- 58 -
5.3.1.1 Analysis of contradictive objectives between universities and private sector	- 59 -
5.3.2 Different objectives between other collaborators	- 60 -
5.3.2.1 Analysis of different objectives between other collaborators	- 61 -
5.4. Financial problems	- 62 -
5.4.1 Analysis of financial problems	- 62 -
5.5 Summarizing model	- 63 -
6. Combined regional and corporate analysis	- 64 -
7. Conclusions	- 66 -
7.1 Further Research	- 70 -
8. References	- 71 -
Our knowledge journey	- 73 -
Appendix 1	- 75 -
Appendix 2	- 77 -
Appendix 3	- 78 -
Appendix 4	- 79 -
Appendix 5	- 80 -

Definitions

Co-operation:

When people or organizations decide upon a common goal, where the different parts trust each other to do what needs to be done in order to accomplish the common purpose.¹

Collaboration:

Means to genuinely sharing ideas with the purpose to build a larger understanding or a new insight, together.²

Verna Allee makes a comparison between co-operation and collaboration through the word; "discussion" which has the same roots as the word; "percussion" – which means to hit. Co-operating is to discuss by hitting each other with ideas until one idea wins and collaboration is to create ideas together.

Meeting places /forums:

A social arena where actors from different organizations in a region can meet and create trustful relations.

Innovation:

Innovation encompasses the full spectrum from creative idea generation through full profitable commercialization. Successful innovation depends on converting knowledge flows into marketable goods and services.³

The Öresund region:

A transnational region divided by the Öresund strait with Skane on the Swedish side and the islands Zelaland, Lolland, Falster, Mön and Bornholm on the Danish side. The Öresund region is connected by the Öresund Bridge between Malmoe and Copenhagen.

¹ Interview Verna Allee

² Ibid

³ www.entovation.com/samplechapter.htm (2009-06-10)

Abbreviations

FDI – Foreign Direct Investments

IC - Intellectual Capital

ICT – Information Communication Technology

IMO – Innovation Management Officer

ISA - Invest in Skåne

MNC – Multinational Corporations

NGO – Non Governmental Organization

PWC – PricewaterhouseCoopers

SME – Small and Medium Enterprises

DCF - Discounted Cash Flow

NPV - Net Present Value

CSR – Corporate Social Responsibility

1. Introduction

This chapter describes the background of the subject as an introduction to the reader. Furthermore the chapter presents a problem discussion followed by the purpose of this thesis. Delimitation and a disposition of the thesis will end this chapter.

1.1 Background

Globalization and digitized forces in today's world increase the competitive pressures on companies, countries and regions more than before. The increased competition has made innovation more crucial on the market in order to, not only survive but to grow and flourish. Innovations and creativity are today the drivers in the Western economies since cheap and skilled workforce from the East constantly increases. To stay competitive, the Western companies must create innovative cultures and structures in order to create value. Henry Etzkowitz, the founder of the non-linear innovation model Triple Helix, argues that innovation is most likely to occur when different parts of the society collaborate. By keeping innovation work in-house, companies risk losing great innovations since most innovations occur when two or more bodies of knowledge work together. According to Debra Amidon the process of innovation is knowledge creation, knowledge translation and knowledge commercialization.

As most innovations are developed through collaboration, one could wonder what it takes to succeed and find the right collaborative partners. For companies, collaboration has shown to be vital in order to succeed with their innovation work. Possible collaborative partners could for instance be; customers, suppliers, competitors, universities, NGO's and the public sector. Globalization does not only put pressure on companies to innovate, it also enables companies to be situated throughout the whole world. Regions can with different initiatives attract companies to choose their region as a new business location, as for instance, the Öresund region.

The southwest of Sweden and the east side of Denmark forms the Öresund region. This region is well known for its highly developed infrastructure, well educated population and its enterprises within biotech, IT, logistics and design, just to mention a few. ¹⁰ In order to create an innovative environment, one could not only see collaboration for innovation in a purely

⁴ Amidon. The challenge of fifth generation R&D (1996) P.34

⁵ Allee, Taug. Collaboration, innovation, and value creation in a global telecom (2006) P. 2

⁶ Henry Etzkowitz. *Trippel helix modellen – Den nya innovationsmodellen* (2005) P.13

⁷ Von Stamm. Collaboration with other firms and customers: innovation's secret weapon (2004) P.1

⁸ www.entovation.com/samplechapter.htm (2009-06-10)

⁹ Owen, Goldwasser, Choate & Blitz, Collaborative innovation throughout the extended enterprise (2008) P.1

¹⁰ www.oresundregion.org/bd9000c (2009-05-10)

business aspect. To create an innovative environment one should also take the regional aspects into consideration since they together foster innovation and synergies.

The new European Spallation Source, ESS, that Lund has applied for is one initiative that is made in order to extend the innovative environment that exist in the Öresund region and not only put Lund on the research map but the whole country of Sweden.

When evaluating the candidates for the ESS facility, the competition has been hard where only the most attractive and flourishing regions suitable for the project throughout Europe have been considered. At the moment most factors points towards a decision that ESS will be located in Lund¹¹ which further signifies Öresund as a region with great potential. Having ESS in the Öresund increases the potential of the region distinctively. The regional economy has potential to increase with 214 billion SEK until the year of 2040 and create about 700 new job opportunities annually. However, this will only happen if a great collaboration and interplay between all the different kinds of actors in the region take place. The least expected outcome is that the region's economy will increase by 1 billion a year due to the innovation climate that will arise around this facility. With this in mind, it is therefore interesting to study how these combined aspects influence each other and look at the collaboration for innovation in the Öresund Region.

1.2 Problem discussion

The common idea of innovation is that innovations are important in order to find new ways to create value, which is highly emphasized today. Articles have been written about innovation and the importance of collaborating with others to innovate. Authors and influential corporate leaders have developed several approaches on how to collaborate in efficient ways. Regardless of the approach, companies need to have a focus on innovation and understand the importance of collaboration and the difficulties they are facing.

However, just having fund the right approach does not automatically lead to the creation of new value. There are several factors that companies have to consider. One factor is the location aspect. Today there are several locations throughout the world that are considered as successful clusters, but what are the underlying factors behind the success of these locations? How can the Öresund region affect the innovation work for its enterprises?

The myth of a genius sitting in his room and providing the world with new innovations and wealth cannot be applied anymore. Innovation work is no longer an individual game, but

¹¹ www.skane.se/templates/page.aspx?id=257794 (2009-06-07)

¹² www.sr.se/cgi-bin/ekot/artikel.asp?artikel=2869505 (2009-05-27)

¹³ Johansson. *Medici Effect* (2004)

rather teamwork.¹⁴ The society has reached a point where it is too complicated to stand alone. Interactions must be viewed as a starting point between people and organizations, both public and private, if going to be successful in the future.

A study on collaboration for innovation was made 2008 and this study identified both that companies must involve stakeholders in the innovation process and that companies especially have to see suppliers not only as providers but also as strategic partners. Since the Öresund region is one of the most expansive regions in Europe, only beaten by London and Paris as the most invested region 2006, we find it interesting to study a possible regional impact on collaboration for innovation. Further on, we find it particular interesting to find and understand what factors in the Öresund region that prevents collaboration for innovation and understand what the difficulties for collaboration might be. What makes collaborations successful while others are not? This thesis will have a focus on the difficulties to overcome in order to succeed in collaborative innovations.

1.3 Research questions

- What are the difficulties or barriers that inhibit collaboration for innovation in the Öresund region?
- What impact has the Öresund region on companies' ability to collaborate?

1.4 Purpose

The Purpose with this thesis is to study the difficulties of collaboration for innovation in the Öresund region and consider the region's impact on collaboration for innovation.

1.5 Delimitation

We have executed this study with delimitation to organizations within the Öresund region. Due to lack of time and schedule conflicts we have not been able to make the interviews with representatives from Denmark and we have therefore executed this study from a Swedish perspective. This thesis has an innovation focus on Management innovation, Product/Service innovation, Strategic innovation, Operational innovation.

_

¹⁴ www.e24.se/entreprenor/artikel 1288849.e24 (2009-05-27)

¹⁵ Cappemini. *Collaborating for innovation* (2008)

¹⁶ www.socialekonomiskane.se/wp-content/plugins/wp-downloadMonitor/user_uploads/Peter_Billing_-

F%C3%B6rening%C3%96resund__-_Inspirationsnotat_5.12_2.pdf (2009-04-09)

1.6 Structural mind-map

In the introduction we described the importance of innovation as vital in order to be unique and competitive. When understanding the importance of innovation and uniqueness the possibilities to create a Blue Ocean arise.¹⁷ Companies which today are looking for Blue Ocean's need innovations which in turn require collaboration. Through these innovations a Blue Ocean Strategy can then be created.

This thesis will focus on the interactions between, all important actors for collaborative innovation work and several regional factors in the external environment affecting the organizations during their collaborative innovation processes in the Öresund region. We here highlight the differences of collaboration and co-operation (see definitions). In order to execute this study, the theoretical framework consists of the Penta Helix model, which includes several actors in the Öresund region, in the private sector, public sector as well as NGO's, academia and the enthusiasts. Considering company's abilities to collaborate, two main theories "Which collaboration is right for you?" and the "ABC-framework", will be used for analyzing potential findings.

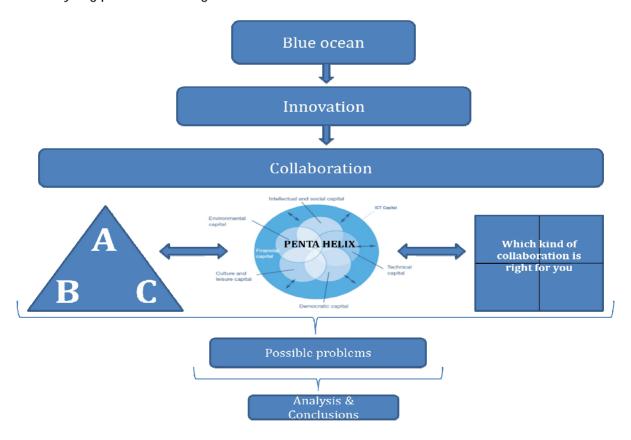


Figure 1 - The Structure of the thesis

¹⁷ Kim, Mauborgne. *Blue Ocean Strategy.* (2004)

2. Methodology for studying collaboration for innovation

This chapter will present the chosen approach for studying collaboration for innovation. The purpose is to inform the reader about the approach in order to value the result of this master thesis.

2.1 Research approach

To conduct this study on collaboration for innovation from a company perspective in a region where much of the earlier research has been on integration and how the region can foster innovation¹⁸, we aim to combine a quantitative and a qualitative study. Through a Swedish perspective we aim to gain a broader understanding on how companies within this region work and collaborate for innovation.

This thesis has a deductive approach since our collection of data was based upon appropriate theories. The data was collected in order to be able to combine the empiric material and chosen theories for analyzing collaboration for innovation in the Öresund region. The thesis is as well based upon an inductive approach hence empiric material have been gathered, open to new aspects. A combination of these two approaches is called an abductive approach. ¹⁹ This has led to a connection to relevant theories, suitable to analyze the gathered data. By having the chosen approach, the study has had an open mind to new aspects arisen in the process.

2.2 Data collection

This study has a focus on companies in the Öresund region. However, in order to be able to study the collaboration and difficulties between different parts in the region, we have found it necessary to use a combination of both a quantitative and a qualitative method in our collection of data. Our empiric material therefore comes from both a web survey and personal interviews in order to reach satisfying and reliable results. The participants in the web survey and the interviews have been chosen in the belief that they could provide us with the most appropriate knowledge for executing the study successfully.

To gain a deeper understanding of how companies in the Öresund region collaborate for innovation we choose to use a web survey since this is an effective method for collecting a greater amount of data. Due to the number of respondents we aim to study, surveys will be less costly and more time efficient than to use interviews initially.²⁰ To gain a deeper understanding of collaboration for innovation, the other important actors in the region, such as public sector, academia, enthusiasts and NGO's, has to be considered, whereupon we

¹⁸ Region Skåne. Synpunkter på forskning, utbildning och utveckling – Skåne och Öresundsregionen (2008)

¹⁹ Alvesson, Skjöldberg. *Tolkning och reflektion* (1994) P.41

²⁰ Bell, Bryman. Företagsekonomiska forskningsmetoder (2005) P. 162

have interviewed key persons from different kinds of organizations within the Öresund region and then complemented these with secondary empiric data. This combination of methods enables us to gain deeper and more detailed answers.²¹ However, we are aware of the risks of receiving individualistic subjective data involved in interviewing a small number of people. Therefore we have analyzed the empiric data carefully in order to avoid subjective thoughts and values from the chosen respondents.

2.2.1 Web survey

In order to collect data from companies in an efficient way, we choose to distribute a survey online, since it is the most convenient method. Our web survey is what one would consider as a traditional survey with the same disposition and structure as most web surveys, thus makes it easier for the respondents to understand the questions and thereby give valid answers. The advantages from using the web as the distribution channel made us choose this method. By using the web, we had the possibility to use web-based software allowing us to design and code our survey as desired. Another advantage is that the result from the respondents will be collected in a database, which makes it less time-consuming than if we were supposed to code all the answers ourselves.²²

2.2.2 Selecting the respondents for the web survey

Since we aim to study the difficulties with collaboration for innovation in the Öresund region we decided to select the respondents to our survey from the industries, which characterize this region. To identify these industries we used the Öresund region's main webpage with information about the region and then localized the companies within these industries through the web. When the list of interesting and potential companies was made, we identified key persons who could answer the survey. The selection of respondents to the survey comes from the main company clusters in the region, however complemented with other industries we found interesting for our study. Within each industry and cluster, we identified the most interesting companies which we thought would bring us the most reliable knowledge about collaboration for innovation and the region. The last step was that we within all chosen companies, on both sides of the strait, allocated and contacted 4 to 6 key persons making sure they could participate in our study by answering the survey. Escape of the strait is allocated and contacted 4 to 6 key persons making sure they could participate in our study by answering the survey.

We received 162 answers from respondents representing 49 companies on both the Swedish and the Danish side. There was a fall off on 13 companies and 150 respondents.

²³ www.oresundregion.org (2009-03-11)

²¹ Bell, Bryman. Företagsekonomiska forskningsmetoder (2005) P. 361

²² Ibid. s. 530

²⁴ Ibid. (2009-04-15)

²⁵ Bell, Bryman. Företagsekonomiska forskningsmetoder (2005) P. 118

2.2.3 Interviews

When conducted the thesis we used a semi-structured interview guide to cover the themes interesting for our study. This kind of interview guide enabled us to ask guestion and followup on the answers to get more detailed answers. Since we wanted the respondents to answer as honestly as possible we did not present the questions before the interview. All interviews was recorded, something that the respondents before the interview gave permission to. We did not experience any inconvenience from the respondents considering the recording, thus make the data we collected valid. It also minimized the risk of not reproducing the information correctly. In order to save time, and make the interviews more efficient, we gathered a group of people together which gave the interview a more open discussion approach. We are aware of the risk it has on affecting the respondent's answers but considered the advantages this approach has with getting different perspectives on issues from different respondents. This method can in a way function as a critical filter, making the respondent's answers more valid. However, it can also create the opposite effect, creating a risk for the respondents to withhold information, but at large, we believe the advantages overcame the disadvantages. Our last interview with Verna Allee was made on Skype due to her location in France on the set date. A negative factor with executing this interview over Skype was that we could not interpret her body language while answering our questions. This side effect do we see as minor compared to the input she gave us for our thesis especially since most of her input was of theoretical characteristic.

2.2.4 Interview respondents

The deep interviews were made with interesting key persons in companies and organizations who could provide us with information about the Öresund region and collaboration for innovation. When selecting the interview respondents we searched for persons who worked with questions concerning the Öresund region, collaboration and or innovation.

The first interview was made with Martin Lindholm at E.ON – Climate and Renewable. He is responsible for new technique and innovation and could share with us his opinion on collaboration for innovation. Martin was chosen as a person to interview since he works within the Öresund region for a company who is influenced by new innovations and therefore should have knowledge about the topic in this study.

Our second interview took place at Region Skåne in Malmoe. We find Region Skåne interesting since it represents the public sector and is among the most driving forces on integration, collaboration and innovation in the Öresund region from the Swedish side. Carin Daal, responsible for innovation processes, was therefore considered as a useful key person who shared useful knowledge and information for the thesis.

Our third interview had a different approach, partially in order to save time, but also to gain synergies, with new interesting perspectives arising through the discussions. In this group interview the three participants Evy Lundgren Åkerlund, Business Coordinator at Lund Bio incubator, Micael Gustafsson, CEO at Öresund IT and Bodil Rosvall Jönsson, CEO at MINC, answered our questions and shared useful information. The fact that it was three participants made it easy for them to complement each other thus giving us more detailed and complete answers in comparison with individual interviews.

Our forth interview was made with Verna Allee, President of Value Networks, LLC, and ValueNetworks.com™. The interview was made to gain a deeper understanding for value network theories.

2.3 Credibility of the study

2.3.1 Validity

To achieve high validity and have the possibility to generalize the results in this region we have first of all carefully defined the concept behind the key words in our study; Collaboration, Innovation, Meeting places and the Öresund region. ²⁶ Definitions of specific key words have been done in order to reduce the risks of misunderstanding the questions and meanings of the concept in the web survey and the interviews.

Considering the web survey, we have carefully chosen all our respondents, which all are linked to innovation, representing SME's as well as MNC's on both the Swedish and Danish side. Since the web survey has been executed on both sides of the strait, the validity could be regarded as high, which makes it possible to carefully generalize the result within the Öresund region.²⁷

Regarding the interview respondents, they all have experience from both different collaboration projects within the Öresund region as well as innovation in their own organizations. The respondents are thus all of high creditability and in positions expressing their opinions and experience from Öresund trustworthy and a vital empiric part of the thesis.

2.3.2 Reliability

By using the structured procedure described above (see 2.3 data collection) where we critically selected the companies associated with, and representative for, the Öresund region, makes the results of the web survey valid and with a high reliability. Furthermore, our questions have been formulated in a way we consider can be done again to receive

_

²⁶ Bell, Bryman. Företagsekonomiska forskningsmetoder (2005) P.48

²⁷ Ibid. P. 49

similar answers.²⁸ However, our aim has never been to generalize the study outside the Öresund region, although it is constructed in order to be feasible for similar studies in other regions.

2.3.3 Representativity

In our web survey we started off by choosing the industries, which are characteristic for the Öresund region, followed by identifying companies and key persons at a higher organizational level who to some extent are responsible for innovation.²⁹ The choice of respondents and the high answering-frequency makes the web survey representative for the Swedish side of the Öresund region. The persons we have interviewed have all been from organizations that are well established on the Swedish side of the strait, making the representativity of this master thesis high.

2.4 Sources and data collection

The theoretical part of this study is based upon a series of articles published in trade press written by famous researchers and professors within the innovation and collaboration fields. We have as well used theories and models about regional collaboration and how different parts of a society work together to innovate. In this field, theories are taken both from literature as well as from recently implemented reports. The advantage we find in using secondary data from well-renowned authors is that data with high quality has already been collected, which not only gives us great knowledge about the theoretical complexity but it also save us time and effort. However, there are also disadvantages to keep in mind when using secondary data. Theories about innovation and collaboration tend to be a complex field, which can make the secondary data difficult to understand sometimes. However, we believe that the theories we have chosen have not been the most complex ones and that they have been helpful in our effort to understand the field we aimed to study. The models we have chosen to use as a theoretical framework of the thesis are both relevant and applicable for studying the region's capability for collaboration for innovation.

This study is also based upon primary data collected from our 6 interview respondents in order to get a deeper understanding on how the Öresund region can foster collaboration for innovation and how companies might see difficulties with collaboration processes. There are always risks involved with personal interviews since it might be the respondent's personal opinion they express. As researches, we have therefore tried to verify this primary data

³⁰ Ibid. P. 231

²⁸ Bell, Bryman. *Företagsekonomiska forskningsmetoder* (2005) P. 48

²⁹ Ibid. P. 111

³¹ Ibid. P. 235

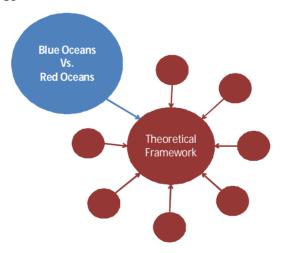
critically against the existing theories within this field. Further on we have collected secondary data to complement our primary data.

3. Theories on collaboration for innovation within a region

In this chapter relevant theory based upon collaboration for innovation is presented. A theory on how a region can work in order to get an attractive and a prosperous environment will also be presented in this chapter.

This study is aiming towards describing difficulties with collaboration for innovation as well as discussing the impact the Öresund region has in this matter. The following theories are chosen in order to understand the difficulties and be able to pin-point them. The disposition of the theories is based upon the idea that one first has to understand the business climate a company operates in, which is something that the Blue Ocean Strategy explains. This theory introduces the difficulties which companies are facing in the existing business climate and provides the thesis with relevant statistics on innovation. Blue Ocean Strategy is followed by a theory on how innovation projects can be neglected. Then theories which have been chosen in order to understand how collaboration can prosper within a region and what elements a region consist of follows. Collaboration theories are then presented and these can be used as a tool to analyze and categorize collaboration and provide knowledge about the importance of knowledge networks.

3.1 Blue Ocean Strategy

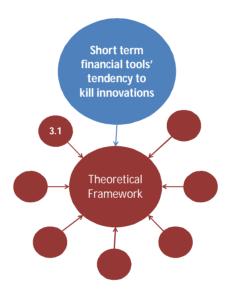


The business universe consists of two spaces, which the authors to the article Blue Ocean Strategy call; Red Oceans and Blue Oceans. Red oceans are the space which companies exists and operates in, the so called known market space, while the blue oceans is the unknown market spaces where different segment of customers can be served. Within the blue ocean, demand is not something that companies fight over, but demand is being created by the

companies. In order to create a blue ocean, companies have two choices; either by giving birth to a whole new industry or by changing the boundaries of an existing industry.³²

The problem with the business universe is that most companies are trapped within their red ocean. In a study of business launches by 108 companies the authors to Blue Ocean Strategy found that 86 % of those were line extensions, improvements to existing offerings. Only 14 % were made to create a new market or industry. The 86 % stood for 62 % of the total revenues but only 39 % of the profit. The launches aiming to create a new market or industry delivered 38 % of the total revenue and 61 % of the total profit. This proves that companies are more or less focusing on the red oceans, while the launches towards the blue ocean are described as the more profitable ones. ³³

3.2 Innovation Killers



Many managers find it hard to innovate successfully and thereby focusing too much on the most profitable customers. They then tend to forget new innovations and products for their customers. The authors to the article "Innovation Killers: How financial tools destroy your capacity to do new things" states that financial tools can block successful innovations.

They mean that by misapplying short-term financial instruments such as Discounted Cash Flow (DCF) and Net Present Value (NPV) companies can get stuck in the DCF-trap. DCF is considering the investment in isolation, and does not take into consideration that if a company does not invest in new innovations, competitors might do so and therefore assume that the cash flow will be unchanged. To do nothing does not give a company the same cash flow as the present one, which is why managers must take other factors into consideration.

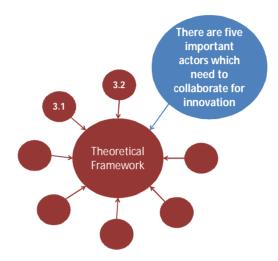
.

³² Kim, Mauborgne. *Blue Ocean Strategy.* (2004) P. 1

³³ Ibid. P. 2

It is therefore wrong to decide on an innovation investment by deciding if it makes a company better off than they are today.³⁴

3.3 Triple Helix and Penta Helix



A model used for collaboration across borders in terms of different organizations is the triple helix model, a non-linear model of innovation which has been developed over the last decades. With a non-linear model, Etzkowitz and Leyesdorff mean that the innovation processes occurs interactive and recursive which also affects the amount of input and output to be expected from the processes. Further on, they argue that for the triple helix model to work fully, it is not only the relationships between the three spheres university, industries and public sector that matters, but also the transformation within each sphere in order to adapt towards the new innovations occurring.³⁵

³⁴ Christensen, Kaufman & Shih, *Innovation Killers – How Financial Tools Destroy Your Capacity to Do New Things* (2008) P.1

³⁵ Etzkowitz, Leyesdorff *The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university – industry – government relations* (2000) P.111 & 114 & 118

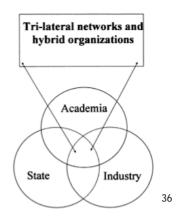


Figure 2 - Triple Helix III

Etzkowitz and Leyesdorff argue that most countries and regions, tries to attain the triple helix III approach where the three spheres instead of being distantly linked together, they create a tri-lateral network or a "hybrid organization" with the purpose of gaining an innovative environment through collaboration between: University spin-off firms, tri lateral initiatives for knowledge based economic development and strategic alliances among firms, with both SME as well as large companies in all kinds of fields. The public sector should encourage rather than control the arrangements between and among the spheres. Considering the role of the academia, it is to build up the intellectual capital in the region, combined with research. The roles or key tasks of a helix can sometimes shift them in between. Information Communication Technology (ICT) have made great impact on the type of interaction between the helices since much interaction can be done through digital interfaces, which also impacts the innovation in terms of environmental inspiration. 38

However, there are more elements to consider when looking at a region. An example is the report "Öresund Social Innovation Zone" ³⁹, which address the importance of a forth element – NGO's. However, PricewaterhouseCoopers (PwC) has through their global study "Cities of the Future" ⁴⁰ come up with a fifth element. They argue that adding NGO's are not enough and that a fifth element the "citizens or enthusiast" are vital. A focus on the enthusiast has to be taken into consideration within each of the other four elements, since it is the most driven people in academia, public sector, NGO, and private sector which will create the transboundary and fruitful links them in between. Further, they point at the importance the

³⁶ Etzkowitz, Leyesdorff *The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university – industry – government relations* (2000)

³⁷ Ibid. P.111

³⁸ Ibid. P.117 & 119

³⁹ www.socialekonomiskane.se/wp-content/plugins/wp-downloadMonitor/user_uploads/Peter_Billing_-_F%C3%B6rening_%C3%96resund__-_Inspirationsnotat_5.12_2.pdf (2009-04-29)

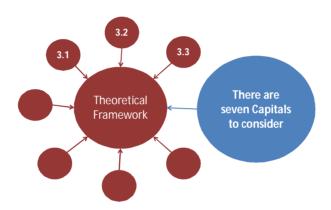
⁴⁰ PwC Cities of the Future – Global competition Local leadership (2005)

public sector has when it comes to encouraging initiatives, whereupon they put them in the centre of the model.⁴¹



Figure 3 - Penta Helix

3.4 Capitals within a region



In order to make a region prosperous and growing, financial capital is vital, however, to attain money and growth in a region it needs successful corporations which in turn are depending on people with the right knowledge and expertise. Thus make a focus on the factors creating the financial capital of the organizations necessary. For a region to be attractive, there are many elements playing a crucial part, elements that can be described in terms of:

- Intellectual and social capital
- Democratic capital
- Technical capital
- Culture and leisure capital
- Environmental capital.
- ICT Capital (information communication technology)⁴⁴

- 24 -

⁴¹ Visionären. Tidning för kommuner, landsting och trossamfund (2005) P.4-7

⁴² PwC Cities of the Future – Global competition Local leadership (2005)

⁴³ Ibid. P. 8-9 & 38

⁴⁴ Ibid. P. 37

3.4.1 Intellectual and Social Capital

The intellectual capital, $(IC = HC + SC)^{45}$, is among the most valuable assets in a region and a vital resource in a knowledge economy. When looking on cities in a knowledge economy, the relational and organizational aspects of intellectual capital are the most important dimensions. The intellectual capital are the most important dimensions.

The intellectual capital consists of the components: Human-, Organizational-, Social-, Innovation- and Process-capital which all are linked together⁴⁸. When studying regions, this is crucial for innovation since the intellectual capital provides the region with the ability to innovate. The intellectual capital together with welfare-provision, the creation of formal and informal networks for exchanging ideas and knowledge, integration and encouraging initiatives becomes critical resources in a region in order to create the financial capital.⁴⁹

3.4.2 Technical Capital

Looking at the technical aspect of a region, two main issues are crucial. First, technology can be seen as a driving force which endows with opportunities to improve efficiency and create new innovations. Secondly, it is vital for investments since technology represents a new and growing market. A high technology density can attract new business and organizations to a region. The technical capital is also a major part of the infrastructure. ⁵⁰

3.4.3 Financial Capital

Vital for a region to function is the financial capital, which is generated from the companies through taxes; given that, what have been mentioned above is working and is attractive. The above described factors are thus all depending on each other.⁵¹

3.4.4 Cultural and Leisure Capital

Cultural- and leisure- capital are crucial components and challenges for a region to consider, when trying to attract creative and innovative businesses and people. Thus makes it important for cities and regions to work on unique brands associated with their particular heritage and their supply of culture, nightlife and other entertainment experiences. Another important factor is location, which in some way or another, in terms of triggering and developing innovation are unique. The successfulness lays within being able to attract the intellectual capital coupled by the corporations thus force the location to be a good place for

⁴⁵ Chang. Impact of Intellectual capital on organisational performance (2009) P. 4

⁴⁶ PwC. Cities of the Future – Global competition Local leadership (2005) P. 3

⁴⁷ Edvinsson. Aspects on city as a knowledge tool (2006) P. 6

⁴⁸ Edvinsson. *The hidden values UNIC IC value system.*

⁴⁹ PwC. Cities of the Future – Global competition Local leadership (2005) P.38

⁵⁰ Ibid. P. 59

⁵¹ Ibid. P. 80

visitors as well as inhabitants and businesses. An important ingredient here is to bring culture and business together. ⁵²

The author, Rickard Florida argues that creativity is the key for growth in a city or a region. In his 3T model he argues that: Technology, Talent and Tolerance are the critical factors. Edvinsson makes a contradiction to these by arguing that these represent the same as intellectual- human- and organizational- capital. 54

3.4.5 Environmental Capital

People are becoming more and more aware when it comes to the quality of their local surroundings, in particular urban areas. When talking about the environmental capital in a region, there are especially three points of views – Clean, Safe and Attractive. One of the major sources of pollution is the traffic in urban areas, creating several problems, first there is the impact on air quality coupled with an increase in diseases like asthma and leukemia. Secondly, it is linked with traffic congestions and longer travel times, and thirdly the noise pollution. Other issues to take into consideration when making urban regions attractive are litter and graffiti, access to clean water, safety and crime levels. ⁵⁵

3.4.6 Democratic Capital

Democratic capital is the interaction between the economy, the politics and the society, in a region. There are three major trends affecting the democratic capital in a region:

- The drive for greater transparency and better communication
- The creation of new forms of democratic participation
- The development of partnerships between private and public sectors and citizens.

The transparency trend has its origin in the information age, generated by the Internet, enabling dual communication flows between citizens in the society and the politicians in the public sector. The second trend, optimizing democratic participation is a trend arising from the decreasing numbers of voters and political parties' participation in the western world which has forced the public sector to offer new forms of participation from the society. The third trend, creating new forms of partnerships, addresses the future importance of collaboration citizens, private- and public sector in between. This in order to solve the public sectors obligations which they in the future will struggle with considering the future demographic development and correlating lower tax income, in the western world. ⁵⁶

_

⁵² PwC. Cities of the Future – Global competition Local leadership (2005) P. 52

⁵³ Florida. The Flight of the Creative Class – the new global competition for talent (2005) P. 34-37

⁵⁴ Edvinsson. Aspects of a city as a knowledge tool (2006) p. 7

⁵⁵ PwC. Cities of the Future – Global competition Local leadership (2005) P.57-58

⁵⁶ Ibid. P. 45-51

3.4.7 ICT Capital

The ICT capital is part of the external environment and a vital part of the infrastructure in a region. ICT is further on a contributing factor of the mega trend speed in the society. ICT enables to send and receive large amounts of information in a small amount of time. The society at large and organizations demands this possibility, which makes it an important factor of a region. ⁵⁷

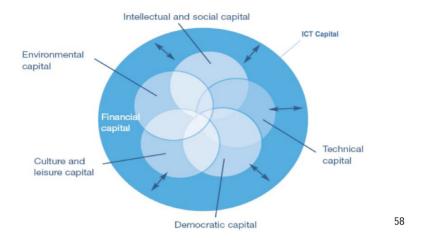


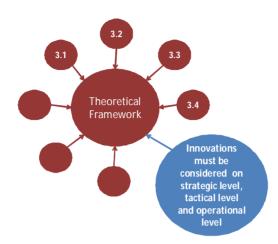
Figure 4 - Integrated capitals

- 27 -

 $^{^{57}}$ PwC. Cities of the Future – Global competition Local leadership (2005) P. 1

⁵⁸ Ibid.

3.5 Being innovative in the knowledge economy



According to Verna Allee most models and ways of doing and analyzing business is old and does not fit into today's environment. As a response, a shift towards more dynamic and interconnected models has occurred, using perspectives like the "market as a living mechanism in a dynamic and living eco system". Therefore making perspectives adopted from various research fields such as: quantum physics, behavioral science and complexity theory are useful. Further on she discusses the stream of not only regular goods and services, but also the flow of information, ideas and, probably most important, the flows of knowledge, referring to what many name "the knowledge economy". In the knowledge economy environment more and different aspects of business is important and makes it hard to create and capture value with the old and traditional business models. ⁵⁹

Another interesting perspective on the knowledge economy is what Debra Amidon addresses in her book "The innovation superhighway". She argues that knowledge, in terms of intellectual capital, is among the most vital resources. If these resources are exploited through innovation, knowledge is the growing resource of economic wealth. ⁶⁰

In order to fit into the knowledge economy and handling today's business environment, Verna Allee has created a model built upon three levels – the strategic level, the tactical level and the operational level. On the strategic level the main focus lays within creating value, something Verna Allee means are accomplished best through value networks in order to create intangible values such as B2B-software, business modeling and scenario planning.⁶¹

On the tactical level the organization should aim for using and applying all knowledge obtainable. Important to consider here is that much knowledge is to be found outside one's

.

⁵⁹ Allee. The New Business and Knowledge Management Fundamentals (2001) P.1

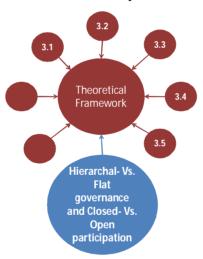
⁶⁰ www.entovation.com/samplechapter.htm (2009-06-10)

⁶¹ Ibid. P.1

own organization in communities, which makes phenomenon like collaboration, knowledge mapping, social networks, virtual team roles and group processes vital. The operational level is about implementing what is described above into to daily practice. Allee here discusses the importance of supporting technologies like e-learning, workflow software, best practice databases, knowledge engineering, search engines and newsfeed.⁶²

The point is the importance of focusing on dynamic relationships, interdependency between markets and networks. Since these aspects are vital when talking about intellectual capital, intangibles and non-financial forms of value. Before organizations was competing in its own, relaying on its own capability, whereas today, according to Verna Allee, an organization is a part of a big complex system, a so called "value network" where the only way to success is to collaborate and cooperate through relationships also outside one's own industry. This, in order to share knowledge and intangibles, thus makes partnerships a critical success factor. This way of working also puts a higher pressure on fairness, ethics, integrity and transparency. 63

3.6 Collaboration for innovation in companies



Collaboration has changed a lot the latest decades according to Debra Amidon, whom argues that there has been a paradigm shift, where collaboration has changed from a win/lose to a win/win paradigm. This since the collaboration emerge competence, knowledge, know-how and skills. Further on she talks about a collaborative advantages rather than only think in terms of competitive advantages.⁶⁴

⁶² Allee. The New Business and Knowledge Management Fundamentals (2001) P. 1-2

⁶³ Ibid. P. 2

⁶⁴ www.entovation.com/samplechapter.htm (2009-06-10)

When collaborating for innovation companies can use different types of collaboration. According to Pisano and Verganti the different kind of collaboration could vary from one company to another. When collaborating, they mean that companies have to consider different factors such as how open the collaboration network should be based upon the corporate strategy. Another factor is who the leader network leader should be and decide which problem to solve and which solution to use. ⁶⁵

The different types of collaboration models which the authors are suggesting are described in figure 5. As can be seen, companies can chose to have an open or a closed network depending on the purpose and the fit to the corporate strategy. They can also choose if there are going to have flat or hierarchal governance in the network.

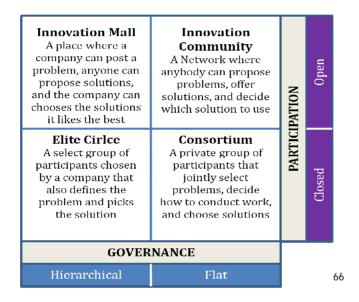


Figure 5 - Which kind of collaboration is right for you?

The larger and more open a network is, the more expensive it is to screen and select the right contributions. A closed network can be chosen if a company believe that they know what kind of knowledge that is necessary to solve the specific problem and that the company has the capability to choose the ultimate partner with this knowledge to collaborate with. This type of collaboration is called an "elite circle".

An open network on the other hand is based on a large number of problem solvers such as, competitors, suppliers, customers, students, experts and inventors to mention a few. The positive effect of an open network is that one can attract several good idea generators, although sometimes, in an open network one does not know who the contributors are. The downsides of an open network are that it is difficult to identify and attract the best solvers of a problem. When the number of participants increase, it is harder for a participant to get his

_

⁶⁵ Pisano, Verganti. Which kind of collaboration is right for you? (2008) P.1

⁶⁶ Ibid. P.4

or hers idea chosen. This is why the best participants prefer to belong to a closed network. Open models work best when the difference between the ideal solution and the average one is small and when the risk of missing out of a much better solution from another contributor is low. In order to make an open network to work the best, it must be possible to evaluate the solutions at a low cost during a screening process. Another condition for an effective open network is that it has to be easy to participate in it. This could be done if the problems could be divided into small parts which several people could work with simultaneously.⁶⁷

The main difference between flat and hierarchal governance is who defines the problem to be solved and which solution to choose. In hierarchal governance, one company has authority to give the network control of the direction and enables them to capture the innovative value. Hierarchical governance is a good option when a company has the capabilities and knowledge to define a problem and evaluate suggested solutions.

When the flat form governance is used, decisions are decentralized or made by several collaborators, this makes all contributors to share risks, costs and challenges with each other. Flat models are suitable when there is no specific company which is leading the process. Flat governance is an appropriate model when all collaborators have an interest in how the problem is solved and will not participate if they do not have the right to express their opinion in the decision-making.

In order to attract collaborators, financial and non-financial incentives must be created. Otherwise companies will not have any collaborative partners. Non-financial incentives could be recognition and reputation among a peer group, psychological fulfillment of pursuing a strong interest or a chance to use the solution in a collaborators own business. In innovation communities, psychological fulfillment is often something people are striving for.

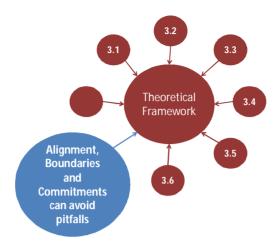
When choosing a way to collaborate, companies must decide upon the following; First of all, if the membership should be open or closed and second, if the network's governance structure for decision making for problems and solutions should be hierarchical or flat.⁶⁸

.

⁶⁷ Pisano, Verganti. Which kind of collaboration is right for you? (2008) P.2

⁶⁸ Ihid. P.3

3.7 Difficulties with collaboration



It can be hard to collaborate with different partners and studies have shown that 50% of strategic alliances fail. Owen et al have come up with a framework to avoid the common pitfalls of collaborative innovation called the ABC framework which stands for Alignment, Boundaries and Commitment.⁶⁹

Alignment

Alignment is the foundation in making sure that the business strategy is communicated throughout the entire organization both horizontally and vertically, which means that all parts have to be aligned. Alignment requires viewing the organization in an innovative perspective and than making sure that the organization work towards the innovations.

- Horizontal alignment usually demands a new organizational unit or a redefinition of existing units. It is important in the horizontal alignment to eliminate the structures and processes which are not effective anymore in collaborative innovation even if they have been previously successful. Horizontal alignment reduces barriers to collaboration across all divisions, functional groups and geographies. To make collaboration for innovation systemic, a focus must be put on how employees get their work done and see to broader innovation goals. HR need to change and have collaboration for innovation in mind and recruit right people, training employees, choose the right compensation and especially integrate collaboration for innovation into the organizational culture.
- **Vertical alignment** translates the business' innovation strategy into an organizational strategic implementation plan which will function as a guideline for organizational change.

Boundaries:

-

Problems in a strategic partnership often depend on managerial problems regarding trust

⁶⁹ Owen, Goldwasser, Choate & Blitz. *Collaborative innovation throughout the extended enterprise* (2008) P.1

issues, decision making, legal aspects, and cultural issues and so on. There are a few ways to avoid these problems:

- Identifying the **best partner** such as customer, suppliers and government and create the ultimate structure for the partnership such as a joint venture is a vital first step for a successful collaboration. To succeed in a partnership, it is important to **understand** each partner's culture and history in order to match the groups together. Legal issues and the time of partnership, if the partnership will be physical, virtual, rigid or flexible must be taken into consideration and be managed.
- Data visibility and technological integration across organizational borders in order to communicate and share information must be well functioned in order to make the partnership succeed.
- Good collaborative tools are of strong importance. Depending on if the interactions
 are physical or virtual or maybe both, the right technology can at an early stage
 make the partnership advanced on collaborative innovation
- By establishing governance terms, building an operational and technological infrastructure for the collaboration, the chances for success will be improved. When the **boundaries** are well managed, innovation could occur among all parts of partners and internal stakeholders. 70

Commitment:

If organizations take collaboration for innovation seriously, they have to make a commitment to transformation and change. A collaborative culture takes time and grows through strong leadership communication and support, performance management does also have an important role of establishing measures and develop the needed capabilities for collaborative innovation. The commitment part of the ABC framework consists of three parts;

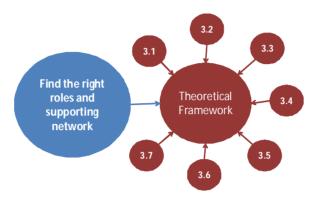
- In order to develop and communicate strategic goals of the collaborative innovation, strong **leadership** is needed. The leadership's goals are to set up and attain the wanted collaborative culture and foster external and internal innovations and reduce hurdles that block collaboration.
- To add structure to the leadership vision, **performance management** is a necessary part of commitment part of the ABC framework. Performance measurements are important in order to motivate and reward innovative actions taken by teams and individuals and help the measurement process.
- Constant **learning** and **improvements** are the third step of the commitment part. This part is about defining and building capabilities for relationship management, idea generation and collaboration. All knowledge which the collaboration creates must be

_

⁷⁰ Owen, Goldwasser, Choate & Blitz, Collaborative innovation throughout the extended enterprise (2008) P.2

captures, spread and developed in the collaboration in order to be as innovative as possible. To improve collaborative innovation, learning and change processes are important.⁷¹

3.8 Value networks



Verna Allee argues that innovation is based on the collective intelligence of an entire region, where the collective intelligence can be symbolized as a brain consisting of neurons and synapses. When engaged in different activities, the brain is activated in different ways, different set of neurons lights up, and different pathways then fires through the synapses. The same symbolism can be used with a value creative network with innovation within a region. One needs to be able to look at the different phases of innovation from the different stages in the innovation process – idea creation to commercialization.⁷²

The question is then how the innovation in the region is being activated in each of those phases and how smoothly the transitioning from one phase to the next is. The neurons from the value network perspective represent the roles which are keys to successful collaborations for innovation. It is therefore important to identify the different roles in the region which are needed for smooth transitions in the different stages of the innovation process. This could be done through looking at different entities and identify who plays which roles. It is not important who plays what role, but that the needed roles are taken by actors in the region, which is something that can vary a lot. Verna Allee argues that the wrong perspective often is used and people tend to look at certain entities and organizations within a region instead of the roles needed for smooth transitions between the stages in an innovation process. This since when looking at innovation in a broader sense, it is important to leave the institutional perspective and focus on the role perspective, in order to not get locked in by just looking at the institutions and then miss the actual dynamics of how people are engaging. The phase of the roles are engaging.

-

⁷¹ Owen, Goldwasser, Choate & Blitz, Collaborative innovation throughout the extended enterprise (2008) P.3

⁷² Interview Verna Allee

⁷³ Ibid.

When the roles are identified, the next step is to locate the incumbents of each role so that people can be educate in the understanding on how the roles are supported, making the transitions between the stages smooth.⁷⁴

Concerning the critical roles, there are different aspects to consider. First, there is the innovation network consisting of the innovators and or entrepreneurs from the different organizations. Secondly there are supporting networks. This can be described as a supporting network in the background which you cannot se. The foreground is then what can be seen. Every value creative network exists in a certain sets of conditions, for example in a region there are legal constraints, physical constraints, transportation constraints, geography constraints, educational constraints to mention some. All these create different conditions for the value network and the constraints appear rather from the conditions then the actual network itself. The problem is usually that there are important roles missing in the supporting networks, which is the largest constraint. A supporting network could be various institutions depending on which stage of the innovation process one is in. It can be roles like the financer, infrastructure, education providers etc. The supporting networks are supposed to support the big, large value innovation network. A common problem is that people tend to forget which their supporting networks are. ⁷⁵

The role perspective is interesting also from a company perspective, where most companies have been stuck with the institutional organizational-chart mindset for many decades. The problem with this mindset is that the companies work under a myth believing that the work will happen by itself which it does not, just because you have an organizational chart telling who is who. The work is done in all charts which make the transitions crucial which are supported by the supporting networks in the company. The supporting networks in a company can be commercializers and marketers etc.⁷⁶

-

⁷⁴ Interview Verna Allee

⁷⁵ Ibid.

⁷⁶ Ibid.

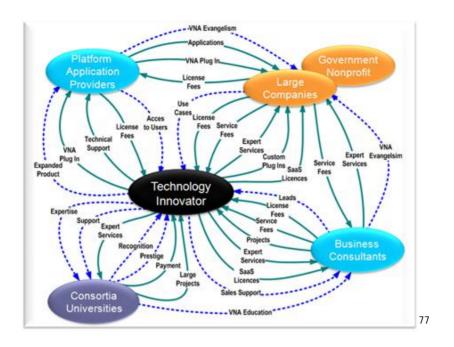
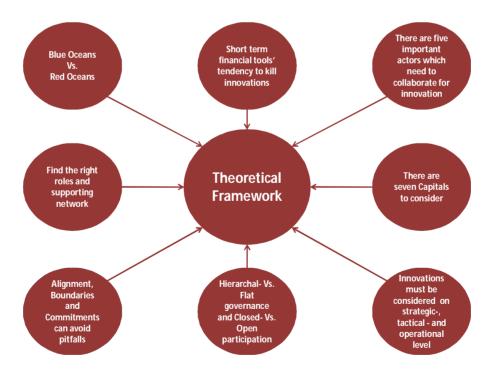


Figure 6 - Value Network

3.9 Summarizing theoretical model



_

 $^{^{77}}$ www.vernaallee.com/VA/About-Value-Networks.htm (2009-06-09)

4. Empirics about regional problems in Öresund

In this chapter the prerequisite of the Öresund region which we identified through our empiric gathering are presented. The presentation is followed by a regional analysis.

4.1 The Öresund region

The Öresund region's environment and infrastructure are identified through our empiric gathering and are presented in the map below. The facts will be further explained and complemented with empiric data regarding the cultural issues in the region.



Figure 7 - The Öresund Region

The Öresund region is one of Europe's today most attractive and dynamic growing regions where 30.8% of the able-bodied are highly educated. ⁷⁸ Already in 2005 the Öresund Region was rated as region number five in attracting most foreign investments in Europe. Compared with Paris and Stockholm, Paris rated as number one and Stockholm rated as number seven in Europe. Copenhagen went from number 19 to 7 between the years of 2000 to 2005 in terms of attracting the most international corporations, competing with the rest of the world. Furthermore, the region is rated as number five in the High-tech industry in Europe. ⁷⁹

The region consists of over 3.7 million people, with about 2.5 million on the Danish side and 1.2 million people on the Swedish side. In comparison with all Nordic countries, the Öresund region is the most populous and most educated urban region in Scandinavia. The Öresund

⁷⁸ www.oresundskomiteen.dk/public_site/webroot/cache/media/file/the_human_WEB.pdf (2009-05-30)

⁷⁹ Ibid. P. 4

region is a rather small part of the two countries geographical sizes and the region stands for 26% of Sweden's and Denmark's total GDP.⁸⁰

The Öresund region has a competent critical mass within various industries such as the IT-industry which have 10 000 companies and 104.000 employees. Other large industries in the region are logistics and food processing. 45% of Sweden's total food processing is located on the Swedish side of the Öresund region⁸¹ and one of the world's leading bio tech clusters, Medicon valley, is located in the region. Within biotech there are 40.000 people employed. He Medicon valley cluster and other clusters have a high standard and have a huge impact when it comes to international recognition and attracting investors. In the Öresund region there are 165 000 companies located where 3500 of them were foreign owned. In the year of 2006 the Öresund region was the third biggest FDI zone in Europe after London and Paris, the Oresund there is a lack of venture capital in the Öresund region. Sweden, most of the venture capitalists are located in Stockholm.

The respondents in the group interview addressed the importance and advantage of having several companies in the same industries in the area, since it makes the region attractive and increase the chances to share and gain from fruitful networks. Another factor which makes the Öresund region attractive for companies is the fact that Sweden is one of the countries in the world which spend the most on research per capita. The Swedish side of the strait increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. It was expressed in our group interview that there are too little focus on the commercial part of innovations and that most attention seems to be on technique and research. The respondents made a comparison with the US, which they believe have more of a venture capital culture, whereas Scandinavia has more of a research heritage. On the companies of the strait increased their part of the strait increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of Sweden's R&D from 2005 to 2007 from 13.7 % to 17.9 %. The separate increased their part of

However, there are several investment projects in order to stimulate collaboration for innovation and attract companies to locate themselves in this region. An example of this is,

⁸⁰ www.oresundskomiteen.dk/public_site/webroot/cache/media/file/the_human_WEB.pdf 2009-05-29

⁸¹ www.oresundregion.org/bd9000c (2009-05-10)

⁸² www.mediconvalley.com/Medicon%20Valley (2009-05-29)

⁸³ www.oresundregion.org/bd9000c (2009-05-10)

⁸⁴ Group interview

 $^{^{85}\} www.socialekonomiskane.se/wp-content/plugins/wp-downloadMonitor/user_uploads/Peter_Billing_-theory.$

F%C3%B6rening%C3%96resund__-_Inspirationsnotat_5.12_2.pdf (2009-05-30)

⁸⁶ www.skane.se/templates/Page.aspx?id=251979 (2009-05-30)

⁸⁷ Group interview

⁸⁸ Ibid.

⁸⁹ www.scb.se

⁹⁰ Group interview

Invest in Skåne (ISA), which are working with large investments, supposed to benefit the Swedish side of the region or particular cities of the region. ⁹¹

As Region Skåne addresses in their report, "En funktionsanalys", collaboration in Skane struggles and is therefore hard to control and trigger. To solve these issues, Region Skåne recently launched a project together with Oliver Schwabe, analyzing how the different organizations in the region are linked together and how they co-operate. ⁹² This research is based on mapping the organizations in Skane and see how they are connected to each other. This project recently began and no data is yet available. As a part of this project Oliver Schwabe was a speaker at an "Innovationskraft Skåne" meeting with a purpose to increase the knowledge of innovation in the region and to allocate the organization's roles in the region. ⁹³

4.1.1 Culture

In order to increase the integration between Sweden and Denmark, integration projects have continuously been going on for decades. Most of them have been subsidized by EU and are: so called Interreg programs, with the purpose to reduce cultural as well as practical barriers considering everything from fiscal, travel to tourist issues. Since the Öresund region involves two different countries, there is a natural cultural barrier and this makes the social meeting places more important since it could trigger collaborations and minimizing the cultural barriers. A phenomenon, which was highlighted in our empiric gathering, was the lack of practical co-operation with the Danish side of the strait. Swedes gladly speaks about the Öresund region, whereas the Danes rather refer to the region as the Copenhagen area. Within the private sector, excluding transboundary clusters like Medicon valley, the co-operation between Swedes and Danish are rare.

4.1.2 Infrastructure

From a northern Europe perspective, Copenhagen has the largest airport with connections to more than 120 destinations which make Copenhagen Airport number eight in size in Europe. ⁹⁷ Approximately 9.7 million people a year travel over Öresund and 19 000 commute every day over the strait. ⁹⁸ In the year of 2008 3 billion SEK was invested in infrastructure in

⁹¹ Group interview

⁹² Interview with Carin Daal

⁹³ Innovationskraft Skåne meeting (2009-05-12)

 $^{^{94}\} www.socialekonomiskane.se/wp-content/plugins/wp-downloadMonitor/user_uploads/Peter_Billing_-theory.$

F%C3%B6rening%C3%96resund__-_Inspirationsnotat_5.12_2.pdf (2009-05-30)

⁹⁵ Group interview

⁹⁶ Interview with Martin Lindholm

⁹⁷ www.oresundskomiteen.dk/public_site/webroot/cache/media/file/the_human_WEB.pdf 2009-05-30

⁹⁸ Ibid. P. 5

Skane. 99 The infrastructure in form of train is well developed in the region. A broad network with trains with constant departures from north to south on both side of the strait makes the infrastructure work as a good alternative to travelling by car. 100

4.1.3 Education

The Öresund region is the most educated region in the northern part of Europe. A special collaboration between Swedish and Danish Universities called the Öresund University is among the most significant university regions today and is measured to be among the top five in Europe considering the publishing of academically articles. The Öresund University has today 150 000 students, 14 000 researchers. 101

4.1.4 Work life balance

Addressed in our group interview was how well suited the Öresund region is for good living and work life balance which has become more important lately. 102 A factor such as the climate has an impact. The climate in the Öresund region is well suited for work throughout the whole year with mild winters and a summer temperature which makes it possible to work even during the warmest daytime hours. The above mentioned factors together with high standards of living, short distances, well developed infrastructure, 15 international schools and hospitals makes the region attractive to work and live in. 103

4.1.5 The public sector on the Swedish side of the region

There is a lack of natural meeting places in the Öresund region where different actors from different backgrounds and organizations can meet, network and build up a trust. 104

Carin Daal emphasized in our interview that the region today has good potential. She mentioned that Region Skåne has recently identified seven factors which are weak today but would make the Öresund region more collaborative and innovative if developed;

- The ability to knowledge construction
- The ability to entrepreneurship/entrepreneurial thinking
- The ability to continually analyze changes in the surrounding world and at the market
- The ability to create long-term legitimacy
- The ability to mobilize and attract resources
- The ability to invest in strategic relations

²⁰sept%2008.pdf (2009-05-29)

www.skanetrafiken.se/upload/Bildbank/Tidtabeller/skanekarta_2008.pdf (2009-05-29)

www.socialekonomiskane.se/wp-content/plugins/wp-downloadMonitor/user_uploads/Peter_Billing_-

F%C3%B6rening%C3%96resund__-_Inspirationsnotat_5.12_2.pdf (2009-05-30)

¹⁰² Group interview

¹⁰³ www.oresundregion.org/bf1000c/code/46 (2009-05-29)

¹⁰⁴ Group interview

The ability to deliver – actual transformation capacity¹⁰⁵

Region Skåne has in the same report addressed six issues which have to be improved in the region in order to further trigger and improve the innovation systems from the public sector;

- The structure, which affects the service sector in particular. There is a lack in industry
 competence on a public sector level, which to some extent makes the support for
 innovation that the public sector offers poor.
- Lack of support in the first phase of innovation processes as well as support for new inventive companies in their first phase of commercializing a product.
- Lack of knowledge transfer between academia and the private sector.
- Lack of having a unified and systematic platform within the public sector in the region for learning and innovation-systems.
- Lack of the coordination ability in order to maximize the utility of various projects, which today tend to spread too much.
- The lack of a driving and overall cooperating part. 106

4.2 Analysis of the regional problems

The Öresund region seems to be an attractive region for locating business and the region has made several integration projects which have made the region one of Europe's most attractive markets. However, there are obstacles embedded in the region, making collaboration struggle and to some extent also impede the innovation.

4.2.1 The Öresund Region from an Intellectual- & Social Capital perspective

From the theories presented in chapter three, we know that an attractive region in today's knowledge intense and global environment cannot be competitive without a good supply of intellectual capital (IC). In our study we have found that the actual knowledge and competence in the Öresund region are of high quality and supply, even the best in some industries and research fields, such as medicine and bio tech. Unfortunately, it seems like the organizational and relational parts of the IC in the region in some ways are straggling. Having said that does not mean it is appalling, since the Öresund region actually has top ratings in FDI and education level compared to other regions. However, the potential of the region is much greater than it has showed the world so far, a potential which to a large extent could be practiced with an increased amount of collaboration between different actors in the private sector but as well, with other parts of the society.

¹⁰⁵ Skånes Regionala Innovationssystem - En funktionsanalys P. 60-63

¹⁰⁶ Ibid. P. 60-63

Problems addressed by our group interview respondents are the lack of supporting entrepreneurship and the sometimes too weak collaboration between universities and the private sector. Our group interview respondents experience that many universities talk about entrepreneurship, but have a tendency to be afraid of entrepreneurial implementation on a larger scale. One could easily think the collaboration incentives from a university point of view would be higher, considering possible joint venture opportunities. This, since in Sweden researchers own the rights to their own inventions and research results. This is something unique for Sweden, which makes the Öresund region attractive from a global perspective. Looking at the Öresund region from a value network perspective, all universities represent a lot of knowledge and competence, which make them vital and supportive background networks. However, it seems like universities have taken more of a knowledge producer role, rather than a knowledge provider role, providing competence to the large innovation value network, which should be a more suitable role in terms of role perspectives.

4.2.2 The Region from a Technical Capital perspective

Looking at the technical aspects of the region, Öresund has a good supply of both high-tech companies as well as ICT infrastructure. Interesting is that in spite of the good ICT supply in the region, about 75 % of the companies in our web-survey expressed an unsatisfactory level on their companies' IT support for collaboration. 21.6 % of the respondents did not use social networking tools at all. Although about 50 % use technological tools for collaboration. Taking the co-operation and collaboration definitions in mind, it seems like most companies in the region co-operate rather than collaborate. In order to increase the collaboration in the region, create a social forum for all organizations in the region could be a solution. if the incentives are right, the collaboration might increase.

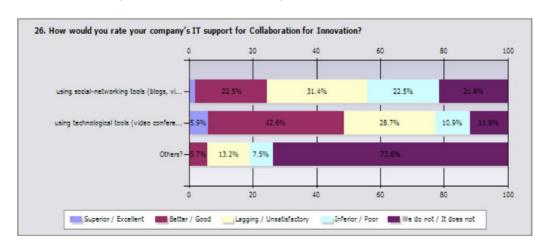


Table 1

The Öresund Region is a good region for high tech companies to locate themselves in since its technical capabilities have shown to be good. The ESS project, which now is most likely to be located in Lund, will improve the technical capital of the Öresund region distinctively.

However, when taking the initial investment cost of ESS into consideration as well as the operating costs. It will probably attract financially strong companies and researchers more, rather than small start-ups. The Öresund region therefore might continue to be a region attracting large companies. This is of course something which is good for the region in terms of job opportunities. It is therefore important to ask the question of what role the ESS as a supporting network will have in order to trigger and support collaboration for innovation when it comes to more than just the actual MNC's. ESS has a good potential for the Öresund region to create a "collaborative advantage" in a global perspective.

4.2.3 The Öresund Region from a Financial Capital Perspective

There have previously been different ways for both Danes and Swedes to avoid taxes by working and living on different sides of the strait. Since the tax issues for habitants and workers in the region's two countries now are dealt with by the public sector, there are other financial capital issues to deal with in the region. Governmental, monetary support is limited in the in Skane just as venture capital is available to a limited extent in the region and is usually attracted only by bigger projects which require larger amounts of money. As venture capital, the lack of monetary support from the government is considered by Invest in Skåne (ISA) and their projects which could be highly profitable for the region. We believe this can stimulate collaboration for innovation in the region. The investor here takes the role as both a financer and initiator which is an important and crucial combination. However, there are today, too few of such initiatives when it comes to start-ups and small emerging companies.

The Scandinavian tradition of research sometimes tends to miss out the entrepreneurs who often have high potential for good ideas and innovations since a high focus is put on research while entrepreneurial ideas are left aside. We believe that a larger focus should be on entrepreneurs and increase the opportunities to commercialize new products and services. However, here is a huge constraint for collaboration, since there are too few to collaborate with when searching for financiers of projects. When looking at the Öresund region from a value network perspective the finance-role is missing. Today the public sector finances various projects. Even if the public sector support projects to some extent it might not be the public sector's role to trigger collaboration since public funds can easily get caught in bureaucratic processes. Region Skåne's role should be more of a coordinating rather than finance character.

4.2.4 The Oresund Region from a Culture- and Leisure Capital Perspective

Even though the Öresund region only has one large metropolitan city, which still is small from a global perspective, the diversity together with the short distances in the region creates a great attraction for living and working in the region. This since a large supply of different cultural events and places, are available on various kinds of locations in the region.

The culture issue is an interesting phenomenon and is probably one of the main reasons why the collaborations between the two countries are not as common as one could think. However, the size of Copenhagen compared to Malmoe and the larger number of Danish people, to some extent explains why the Danish refer to the region as the Copenhagen area, especially since it is their capital city.

The climate, short distances and the developed infrastructure have impacts on the work life balance in the region. In the region it is easy to travel by car or by public transportation from the work place to one's home in an hour. The dark brown area on the map (figure 8) shows the amount of working places within a 30 minutes drive by car on the Swedish side of the strait.

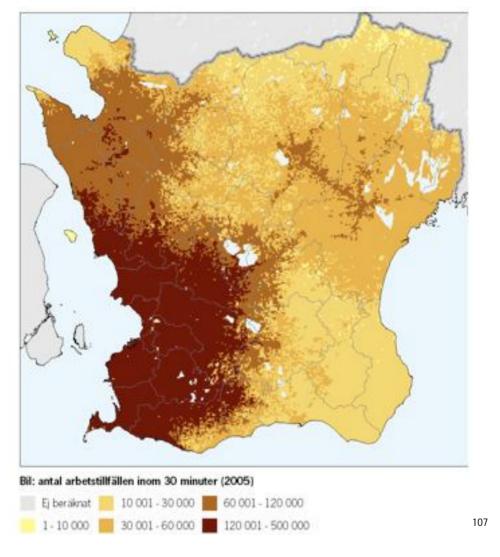


Figure 8 - Workplaces within 30 minutes by car

1

 $^{^{107}}$ www.skane.se/upload/Webbplatser/Statistik/Bilder/kartbilder/kartbilder2/Karta27a%20Kumulativt%20arbe ten%2030min%20bil2.png (2009-06-01)

The different Interreg projects which have been implemented the latest decade, makes it is easy to live in Sweden while working in Denmark or vice versa, both from a fiscal perspective and economic perspective as well as a citizen- perspective. In the Öresund region it is possible to live in the countryside and work in the city without having to travel for hours. However, a side effect of a growing region could be future pollution problems and the environmental capital of a region as a result of more people travelling in the region.

4.2.5 The Öresund Region from an Environmental Capital perspective

From an international perspective, the Öresund region has a rather unique advantage of having a large supply of skilled workers, high quality research, and highly developed infrastructure both in terms of travel and data traffic. In spite of this, it can still offer a small population density which decreases the frequency of problematic traffic congestions, pollution etc, something which often occur in expansive urban comparable regions. However, the Öresund region will most likely reach a critical point as it grows, where an expansion in both public transportations as well as in other infrastructures have to be expanded in order for the region to maintain its attractiveness. This problematic issue is sometimes defined as the friction capital. Given that ESS is located in Lund, the friction capital of the Öresund region is to some extent today already a critical issue.

4.2.6 The Öresund Region from a Democratic Capital perspective

The low power distance is something which is reinforced by both Hofstede ¹⁰⁹ and Florida ¹¹⁰. They also discuss tolerance and self-expression, two factors which both Sweden and Denmark holds top rankings in an international comparison. This makes it easier to get in contact with people on high positions and different hierarchical levels, which might be hard in many other countries, a phenomenon especially addressed in our interview. This gives democratic capital in the region a huge possibility for collaboration. However, in order to utilize these power distances and lack of hierarchical levels puts a pressure on high politicians as well as business leaders and headmasters to take leading roles and to encourage and take collaborative initiatives in order to make the Öresund region a fruitful value network.

4.2.7 Concluding remarks of the region

When looking at the Öresund region as a big value network for collaboration, one can find a large amount of background supportive networks which could consist of; infrastructure, good work-life balance, IC, high-tech and human capital to mention a few. This should be a solid ground for fruitful collaborations in the region if every actor finds its role. A good example of this is the ESS project, which will most likely to be located in Lund. If the Öresund region would not have been able to prove its potential and large amount of supporting

-

¹⁰⁸ Edvinsson. *Lecture* 2009-06-05

¹⁰⁹ Hofstede. Cultural dimensions project management (1983) P.45

¹¹⁰ Florida. The Flight of the creative class (2005) P.149-151

background networks, Lund would never be a considered candidate. If ESS will be located in Lund, it will not only put Sweden, and the Öresund region on the research map of the world, it will also boost the potential of the "Öresund value network" to a new dimension. The reason for using the word potential is that ESS will not automatically improve collaboration further in the region by simply being located there. The ESS-facilities and all the new arising supportive networks, as well as the incumbent networks around, all indeed have to find their own role in the large Öresund Value network system, in order to create growth and build a more fruitful collaboration for innovation.

5. Corporate related problems

In this chapter the empiric material will be presented divided into four different kinds of problematic areas (management related problems, trust related problems, problems with different objectives and financial problems) for companies which we have identified through our empiric data collection. The problems will further be analyzed one by one.

5.1 Management related problems

Management related problems will be the first kind of collaboration problem discussed in this chapter. These are; Change management, undefined strategy, Lack of managerial competence, Stakeholder management and Legal issues.

5.1.1 Change management

As been mentioned previously in this thesis, interaction between different partners is of great importance in innovation work. However, our conducted web-survey has shown that it is not always clear that all members within an organization understand the need for change. Concerns in the survey were expressed towards a resistance for change, especially among middle-management in the organizations. The respondents mean that this leads to no delegation of responsibility for change. This can either be embedded in the corporate culture, where the company believes it does not need to change and by that they do not have an innovative culture as one respondents mentioned. It can also be due to a lack of a clear strategy within a company. Respondents expressed that having employees working and understanding the need for change and innovations is of great importance if going to be profitable in the future. In our survey, participants expressed that in collaboration with external partners the partners showed signs of unwillingness to change.

5.1.1.1 Analysis of change management

The ability to change and adapt to new conditions and environments seem to be of great importance today when companies can compete with each other on foreign markets all over the world. Most of the old traditional business models do not fit in today's business environment and need to be changed. It is not only a stream of new products and services, but also the increased stream of information and knowledge, has changed the way of creating value and this is referred to as the knowledge economy. 114 Companies need to focus on changing accordingly to the market changes and constantly find new suitable ways to create value. To adapt and change with the market, companies need to use the knowledge within and outside in order to succeed. The middle management team is playing an important role in change management and make sure that the idea of change is

¹¹¹ Web survey

¹¹² Ibid.

¹¹³ Ibid.

¹¹⁴ Allee. The new business and knowledge management fundamentals (2001) P.1

implemented within the whole organization. Middle management should function as a link between the employees and the top management, if middle management cannot communicate change, it can be hard for a company to move in the same directions as the market conditions do. The change management is not only an issue for corporations themselves since this is a phenomenon experienced in partnerships as well. When choosing collaborating partners one has to choose carefully an organization with a positive spirit towards change. If a collaborative partner is not open to change it can possibly stop the development for companies' innovations and the creation of new ideas which then have a direct effect on the company itself toward its customers.

5.1.2 Undefined strategy

An unclear strategy affects the communication within a company. Having an unclear strategy affects the culture and the understanding for change. In order to succeed in any business aspect, a clear strategy must lead the whole company toward the set goals. The same applies for an innovative strategy.

The most common innovation for companies participating in our survey is product innovation. As can be seen in table 2 below, 76.8 % of the respondents believed that product innovation was the most common for their companies. ¹¹⁶

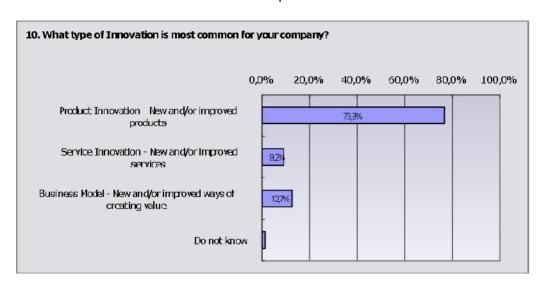


Table 2

Another study of 108 companies has shown that 86 % of their new innovations were product innovation and only 14 % were business model innovations. However, these 86 % only accounted for 39 % of the profits while the 14 % accounted for 61 % of the profits.¹¹⁷

_

¹¹⁵ Web survey

¹¹⁶ Ibid.

¹¹⁷ Kim, Mauborgne. Blue Ocean Strategy (2004) P.2

In our web survey companies expressed barriers for innovation. The problems they expressed were for instance bureaucracy, having a silo-shaped funding model and that production takes most of the R&D time. Respondents also mentioned that innovation projects' financing is often taken from the product line.

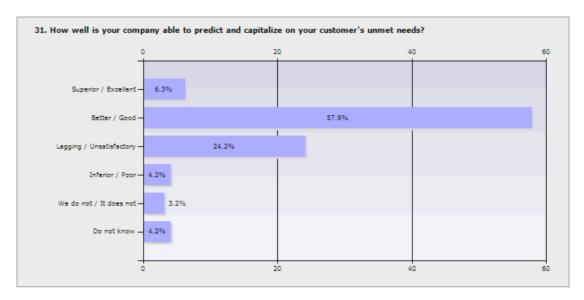


Table 3

As can be seen in the table above, 57.9 % believe that they are good at meeting their customers' needs but at the same time many respondents in the survey experienced trouble related to collaboration with their customers. Mentioned barriers were lack of a structured method and even that the customers do not like the company. 118

The issue with companies having trouble with collaborating with their customers and satisfying their needs show signs of poor methods. Poor methods could be a result of an undefined strategy which affects a company in its possibility to satisfy its customers.

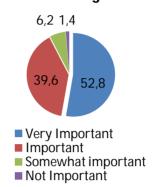
Through our web survey, as can be seen in the diagram below, we could also see that 74.2 % of all management teams support innovations and 93.8 % believe that innovation initiatives are of great importance. In spite of this, it is only 46.6 % of all companies that have an innovation reward system.

¹¹⁸ Web survey

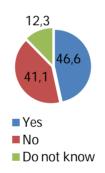
How are the executive-level sponsorship and support for innovation projects rated?



How important are innovation initiatives from members within the organization



Is there a reward system for innovation initiatives in the organization?



5.1.2.1 Analysis of undefined strategy

The presented results shows that not only in our study but also other studies, most of the innovation work is focused on product innovation, which clearly is not the most profitable one since only these accounted for 39 % of the profits. This seems like a great problem for companies and instead of trying to find new business spaces, they compete by launching new products in an existing space and then missing potential greater profit in unseen space, the Blue Oceans. As Verna Allee states, many business models are not up to date which make companies to change their strategy toward new clear goals. To be able to create a good foundation for communicating a corporate strategy throughout the entire company

there must be a vertical and horizontally alignment. Even here do middle management play an important role where they make sure that the strategy is incorporated vertically in the entire organization. The management on the other hand, needs to eliminate dysfunctional or out-of-date-units, which creates barriers for collaboration. The horizontal units must strive towards collaboration for innovation and the HR needs to make sure that the organization has the right employees in the company. Even corporate culture does have an importance in strategic issues. Even if it is hard to change and control a corporate culture the management must lead with example and incorporate an open culture which goes in line with the corporate strategy towards innovative ideas and collaboration. The management does also have to support innovative ideas from the employees. The message leaders and managers send out must go in line with the corporate strategy and they must encourage innovative ideas, for instance with reward systems, to motivate them to think innovative. In our web survey 53.4 % of all respondents either believe that there are no reward systems or that they do not know if there are such systems. We believe that there must be an alignment between innovation initiatives and a reward system since what gets measured and rewarded is what employees actually do.

The issue with companies having trouble with collaborating with their customers and satisfying their needs show signs of poor methods and strategy which affects a company in its possibility to satisfy its customers. One possibility is that the companies or the collaborators have not defined their ultimate role in the value network.

5.1.3 Lack of managerial competence

To manage and lead an organization in innovative projects, there must be an appropriate and competent management- and board team, who not only understand the importance of a clear strategy, but also can implement it. The importance of a competent and understanding management team and board was mentioned as a vital ingredient for a successful collaboration for innovation during our group interview. ¹¹⁹

5.1.3.1 Analysis of managerial competence

A competent management team is in every situation a vital ingredient, therefore also in innovation projects. Since innovations mostly occur in collaboration, a common management team must be decided upon in the first phase of the innovation projects. Choosing a competent leadership is especially important for small entrepreneurs and innovators since managers with a lacking competence could destroy innovations with a high potential to be commercialized. As mentioned before the middle-management has a crucial role in business situations. If middle-management is not competent enough, they cannot mediate knowledge and strategies throughout the company. One can here also address the importance of so called Innovation Management Officers (IMO). What role do they have in a

¹¹⁹ Group interview

company in order for the company to be the innovative? And maybe even more important, what roles should the IMO's take, when looking at innovation from a regional perspective? Gathering different IMO:s from different organizations can create interesting new constellations making way for new types of innovations. The role as IMO:s will probably be more crucial in the future, even within NGO:s and the public sector.

5.1.4 Stakeholder management

Our interviews and survey respondents have expressed that a company cannot have the same approach towards different stakeholders. In order to be successful in collaborations it is important to understand each partner's culture and history. When dealing with different stakeholders, respondents in our survey have said that they do not have any structured model when collaborating, but the collaboration is made differently depending on which partner involved. For instance, working together with competitors is mostly occurring when the projects are very expensive and both parties have a common interest and a shared goal. These kinds of collaborations is being regulated and structured by contracts in order to handle the collaboration and its legal aspects. Important is that the management in a company treats and praise the partnerships continuously by keeping an open dialogue with the partner or partners. Collaborations between companies and universities have different structures which makes different factors vital to consider and manage.

Companies in the Öresund region have through our interviews and the survey expressed that they are open to collaborations with universities. 122 One reason to collaborate with universities and institutions can depend on the companies' different strive for Corporate Social Responsibility (CSR) or that they want to become an active part of the society. Companies in the Öresund region do sometimes commercialize high-developed innovations and make business from university research results. A combination of CSR and a willingness to meet the customers' demand give companies opportunities to integrate their business approach with goals towards both profit and creating value for the society. 123

There are cases where collaboration with universities has been proven to be successful. This kind of collaboration can be based on the idea that universities through their knowledge and high quality research, provide solutions to problems, which the companies or their customers have come up with. It can also be the opposite, where the companies find ways to commercialize inventions from the academia. Through this collaboration the partners can complement each other with, knowledge, research and capital, thus enable researchers to

¹²⁰ Owen, Goldwasser, Choate, Blitz. *Collaborative innovation through the extended enterprise.* (2008) P.2

¹²¹ Interview with Martin Lindholm

¹²² Ibid.

¹²³ Ibid.

continue research with the funding from the companies and the companies to offer good solutions on their customer's demands. Collaboration also makes it easier for all parts to come up with ideas through a dialog instead of universities coming up with ideas, which they later sell to the highest bidder. 124

Collaboration between companies and universities are not only beneficial for the company but it also makes it possible for scientist at universities to finance their research trough the funding from companies. This creates a win/win situation for both parts. Collaboration with universities is not exclusively a question of money, but it also gives companies a chance to get external, expert-opinions and counseling. The knowledge which the universities posses are often highly useful for the private sector since this knowledge can complement the companies in areas in which they lack experience and knowledge, and vice versa. 125

Our survey results show that small companies are the least common partners to collaborate with. 126 It is possible that great innovations and collaborations for innovations go to waste since companies seldom collaborate with these actors. Collaboration with universities does have difficulties regarding different purpose of the outcome, something we will present in more detail in the sector about goal related difficulties. However, governance is also vital when collaboration between public sector and academia since there are various problematic factors to consider.

The final problem that has been emphasized is the problem with maintaining the relation. Employee turnover and new strategies from companies are difficulties when aiming for a sustainable collaboration. 127

5.1.4.1 Analysis of stakeholder management

To be able to attract the best brains and best partners to collaborate with, companies need to create incentives for potential partners. Since different collaborative partners have different ambitions and goals, it is important to create the right incentives for every partner. As mentioned in the group discussion, among researchers there are usually different incentives and motivation factors compared with the public sector. Researchers are usually by incentives taking more of an intrinsic approach, whereas in the public sector e.g. profit and monetary rewards are common. If financial incentives are most appropriate for one partner, the other company must be able to offer financial rewards for its partner. The same applies if the partner strives for self-fulfillment, then the partner company needs to provide the findings and possibilities for the partner in order to continue working on the product, research finding or service. A possibility for companies could be to let the partners gain

¹²⁴ Interview with Martin Lindholm

¹²⁵ Ibid.

¹²⁶ Web survey

¹²⁷ Interview with Martin Lindholm

credit for the end result if this is an incentive for this kind of partner. One could ask how often executives in large MNC, university headmasters/headmistress and politicians meet small entrepreneurs and look for partnership. In order to explore new ways to innovate, companies must look for new collaborative partners. If these actors only collaborate with similar organizations and neglect the smaller firms and entrepreneurs, they miss out on ideas and innovations with high potential for new business opportunities, products and services.

There is a lack of an overall leader for transboundary innovative collaborations in the region. We therefore believe it is important that someone take the role as IMO in all kinds of organizations. The IMO shall make sure that all transitions in the innovation process function with different kind of organizations. The IMO should also take a regional responsibility in terms of being open to stakeholders within the region to get more input. This because it is when different actors work together most innovations occurs.

There are also difficulties of not having the same culture which is mentioned above. This is a great constraint in collaborating. Corporate culture is a highly individual attribute of a company and it is important to find a collaborative partner which has a matching corporate culture. If the culture is affecting the partnership in a negative way, the collaboration might not have the ultimate partners. To succeed in a partnership there must be an understanding for both the culture and the history of each other. The issue with culture can also be due to the lack of knowledge of each other and the partners do not have the proper competence on how to collaborate the best. Just like the definition of collaboration: it is about gathering together and genuinely share ideas with the purpose to create deeper understanding. Thus make all kinds of, organizations within the region, stakeholders to one another. It is therefore everyone's responsibility to assure collaboration and its outcome. This makes the role identification of all organizations in every innovation processes important.

Depending on what partner a company chooses to collaborate with in innovation projects, there are different difficulties and factors to consider. When deciding the best suitable partner for collaboration, the company should decide on the ultimate structure and establish appropriate governance. Once again, the management plays an important role, which, together with the partner decides on governance terms suitable for the collaboration form chosen. By having clear governance it is easier to avoid future problems, further on it helps to create and implement a unified strategy. When a clear strategy is decided the management must lead by example and strive toward an innovative spirit in the collaboration. Regardless if the collaborative partners are suppliers, consumers or competitors the governance terms must be clear from the beginning in order to avoid potential confusions. Important in stakeholder management is to know that a small

¹²⁸ Owen, Goldwasser, Choate, Blitz. *Collaborative innovation through the extended enterprise.* (2008) P. 2

entrepreneur in an incubator cannot be treated the same way as supplier or competitor and that is why it is important for the management to know the differences and how to deal with different partners. Management has to take different supporting roles in different kinds of collaborations

5.1.5 Legal issues

In our group interview, questions regarding the legal aspects were brought up as another main difficulty regarding collaboration for innovation. The legal aspects that were mentioned were issues regarding ownership and risk sharing. One important aspect to consider is; who really owns the innovation? The one that has initiated the collaboration, the one that has put in most money into the project or the one that is taking the largest risk? Issues regarding patents and copyrights are also something that has been emphasized and these are all questions that have to be solved in an order to achieve a fruitful collaboration. 129

5.1.5.1 Analysis of legal issues

As have been mentioned in the previous section regarding the stakeholder management, it is highly important to consider several issues in an early phase of collaborations. Legal aspects must be considered the same way as governance terms should. Which partner will own what part of the collaborative developed innovation? What legal aspects need to be discussed and handled in order to make the collaborations function as well as possible? Questions regarding ownership are as mentioned earlier crucial. In the beginning of an innovation cycle someone needs to lead the innovation forward and take the role as owner of the project. This is important since someone must be responsible and drive the project forward, in the collaboration. Once again the management needs to be able to understand the situation and the condition in order to deal with the legal aspects. By clarify the legal issues in the first collaborative phase and agree on legal issues there will be a higher potential for a successful collaboration with less complications when an innovation is commercialized.

5.2 Trust related problems

After having established and handled the management related problems above, concerning collaboration for innovation, trust related problems is important to consider and handle.

In the group interview as well as in the web survey, the trust issues were regarded as highly important issues to handle, considering collaboration for innovation. On the Swedish side of the Öresund region there are forums and meeting places for companies and entrepreneurs such as; MINC, IDEON and Lund's Bio Incubator. These are meeting places and forums which

_

¹²⁹ Web survey

make it easier for entrepreneurs and companies to meet people with complementing competence and network. To be able to collaborate and share ideas and visions there must be a mutual trust between the cooperation actors. Meeting places and processes which triggers collaboration can be viewed as more important than the actual innovations itself, according to all the participants in the group interview. This since it is when people meet, innovation processes and trust are most likely to occur, which in turn supports the collaborative spirit and the trust between the actors in the region. ¹³⁰

Respondents in the group interview were describing the importance of trust in every phase of a collaborative innovation process. In the first phase of the innovation process the person with the idea/innovation, needs to find a trustworthy partner such as financier or someone who could help commercialize, produce, or sell the innovation. In this phase the personal chemistry between the partners must function smoothly as well as the mutual trust between the partners. Companies in incubators close to each other have an advantage in finding trustworthy partners since they meet competent people in the incubators which make it easier to become familiar with others and establish trust, share ideas and create a fruitful network.¹³¹ The participants in the group interview mentioned that an increased number of meeting places and forums would increase the chances for innovative actors in the region to meet and find partners in their innovation work.¹³²

The trust issue was also mentioned in the interview with Martin Lindholm where he stated that a big issue with collaboration for innovation is the one of giving away corporate secrets. If collaborations are not trustworthy enough, it could be hard to share information and intellectual properties.

The results from the web survey also showed that trust was a collaborative problem, since the respondents' emphasized trust as a problem especially when collaborating with suppliers and customers. In collaboration with suppliers the risk of sharing information was also a main issue as well as the cultural difference which Carin Daal also expressed during our interview.

5.2.1 Analysis of trust related problems

Since trust is a big issue in collaboration for innovation shown in both theories as well as in our empiric findings, this issue requires to be thought trough in order to understand why it is problematic and what the reasons behind the lack of trust might be in order to find solutions to overcome them. Since the Öresund region has a critical mass of people within several industries as well as a good social capital, the potential for fruitful collaborations built on trust and competence are high. The region is full of educated people from several

¹³⁰ Group interview

¹³¹ Ibid.

¹³² Ibid.

universities creating good abilities for collaboration with the private sector. As was mentioned in the group interview there are meeting places on the Swedish side of the strait where trustful relations can be built and developed. However, an increase of those meeting places and forums would increase the social capital and increase the amount of collaborative cooperation's. It could be seen as most of the forums and meeting places, at least on the Swedish side within the region mostly are for entrepreneurs. Unfortunately this seems to discredit the collaboration lying outside of the entrepreneurial and start-up fields.

By connecting more people in the region into social networks and regular meetings, the social capital would increase which not only companies would gain from, but also the whole region. The respondents from our group interview believed that the Öresund region has a good foundation for successful collaborations and business opportunities. Therefore the reasons behind the problematic issues regarding trust must be found elsewhere. Then the cultural aspects could have an impact on the trust issues facing collaborators.

Culture is a phenomenon depending on several factors and we believe that culture has impact on trust issues. Because the Öresund region involves two countries and two different cultures are thus a natural consequence of this. When trust is discussed as a collaborative barrier, differences in the culture could have an effect on understanding the collaborative partners in the other country. The same situation could be experienced between companies in Sweden or Denmark who collaborate with companies in the same country. The corporate cultures in collaborating companies could have an effect on the experienced trust related barriers.

Trust is a factor which can be dealt with, by help from the ABC framework when making sure that the correct collaborative partners and well functioning governance and structure are situated. As all of the other problematic aspects mentioned in this thesis, trust related issues must be dealt with in the early stage of collaborations. A competent management team is, as mentioned, an important factor for a successful collaboration. Since the Öresund region has a large number of competent actors in the business sector in several industries, there must be possibilities to choose the right management teams in Öresund region-collaborations.

A solution might be to create a collective forum on the web. During our group interview it became clear that there is a need for more informal meeting places, where the trust can grow through personal relations with other actors in the region. There are in some ways formal gatherings like Innovationskraft Skåne. However, we believe there is a need for follow-ups in an informal environment. Since it is in the informal forums relations appear thus make trust more likely to arise and supporting roles can be taken more naturally.

¹³³ PwC "Cities of the Future – Global competition Local leadership (2005) P.42

The risk for sharing corporate secrets might impede collaboration. This problem can be a result of companies in general lack a structured approach to collaborate with their partners. If having a community network with either a closed or an open approach they can know their partners and then build up a trust which can lead to further success. There is though, always a risk of indirect sharing of information to competitors. This can also happen when one employee leaves a company for a competitor which in some cases can be more dangerous.

When looking at trust from Verna Allee's role perspective, it is hard to define a specific organization or person to carry a trust generating role. Instead that is a role, and to some extent also, an attitude which all actors in the region has to carry. Once again about the basics of collaboration – together create something bigger, and genuinely share ideas! If cooperations become real collaborations the trust issue will change from a problematic issue to a foundation for future regional growth and success, both in terms of public as well as the private sector.

5.3 Problems with different objectives

The research heritage in Sweden makes collaborations between academia and the private sector difficult. There are often a great contradiction between the private sector and the academia considering the incentives and motivation. Even in our group interview the respondents expressed a problem related to different objectives between universities and the private sector. Table 135

This identified problematic area will be divided in two parts. First, empiric data regarding the contradictive objectives between universities and the private sector will be presented and analyzed. Secondly, empiric data on different objectives between other collaborators will be presented and analyzed.

5.3.1 Contradictive objectives between universities and the private sector

When discussing difficulties with collaboration for innovation, the conflict of interest between universities and companies was identified. The universities and its professors usually have weak incentives to promote their researchers and students, to commercialize their findings since the university then might lose this particular researcher or student and then lose their grant, which they receive per student/researcher. This dilemma often makes the universities to neglect the part of commercializing innovations. ¹³⁶

¹³⁴ Interview with Martin Lindholm

¹³⁵ Group interview

¹³⁶ Ibid.

A factor which should promote researchers to be entrepreneurs is the fact that research findings in Sweden belongs to the individual researcher and not to the university, as it for instance does in the US. Our respondents, which all had experience form this particular contradiction argued that researchers has a different kind of motivation in comparison with business people. Researchers thus have more intrinsic related motives like their findings in particular or what the specific finding could change, whereas, others are driven by what the research results can become in terms of money and business opportunities. Even though there are difficulties in collaboration between universities and companies, there are some good examples of such successful collaboration's in the Öresund region. Living labs in Malmoe and Lund is one example where universities, companies and the public sector, works together on projects within IT, which when finished are commercialized. 137

What usually makes collaboration between academia and the private sector difficult is the long-term perspective on research, in comparison with the companies, who usually have a short-term focus demanding quick pay-off. The other contradiction which our respondents expressed was the company's focus on profit and business models, compared to the academic methodology. 138

In order to succeed in collaboration for innovation, the relation must be taken care of by all parties since the relation must be well function and the goal must be combined in order to make all involved parts work in the same direction towards a unified goal.¹³⁹

The above mentioned problems related to collaboration between academia and the private sector was also emphasized by the respondents in our web survey. 140

5.3.1.1 Analysis of contradictive objectives between universities and private sector The difficulties with collaboration for innovation between universities and companies might be an effect of not having a clear approach on how to collaborate. As been mentioned above, when companies are collaborating, they must treat each partnership individually. That means having a clear strategy before one move in to a partnership and clarify a goal on how and what to achieve. The reason for this kind of problems in the Öresund region today might depend on a lack of not having defined goals and requirements as well as appropriate collaboration tools. It might also be that the actual tool is chosen but still lacks unified and defined objectives or requirements.

However, there are still difficulties in the collaboration between universities and the private sector which is due to the system with grants in Sweden but there are examples which have

¹³⁷ Group Interview

¹³⁸ Interview with Carin Daal

¹³⁹ Interview with Martin Lindholm

¹⁴⁰ Web survey

shown to be successful. By looking at the key success factors in Living Labs, other future collaborations could learn and prosper and turn out successful. Living labs is a good example where Vinnova took the role and created a network in order to foster innovation within the IT sector. This is an example of a successful role perspective – instead of focusing on the organizations, focusing on a role, where the role incumbent identified the needs of an innovation network.

5.3.2 Different objectives between other collaborators

The difficulties for innovation within a company that the respondents in our web survey especially addressed, was that there is often not enough time to innovate since the daily operational work takes up most of the time and that innovation is usually not on the daily agenda. However, the department where most of the innovation "should" take place, the R&D department, is also the place where most innovation occurs. Our web survey showed that 54.9 % of the innovations come from the R&D departments. Having said that does not mean it is always most optimal, since, big companies often have developed their own R&D departments and are concentrating on developing and innovating there, instead of doing it in collaboration with others, thus risk to lose vital input customers might demand in a near future. Having said that does not mean it is always most optimal, since, big companies often have developed their own R&D departments and are concentrating on developing and innovating there, instead of doing it in collaboration with others, thus risk to lose vital input customers might demand in a near future.

When collaborating for innovation, companies are using different parties to collaborate with. As can be seen in table 4 below, the respondents from our web survey answered that they are mostly collaborating with customers and suppliers.

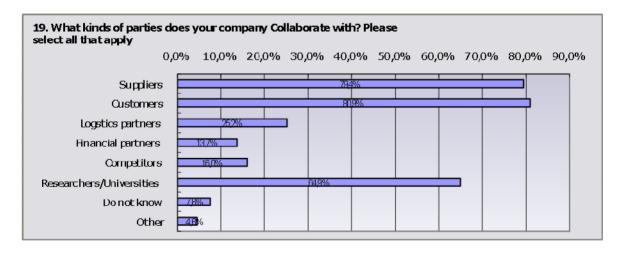


Table 3

The problems and difficulties that were mentioned by the respondents regarding

¹⁴¹ Web survey

¹⁴² Interview with Carin Daal

collaboration with suppliers were problems linked to the risk of sharing corporate secrets that could be valuable for not only their own company but also for others. This is especially critical if a company is collaborating with suppliers which are suppliers to the company's competitors. The risk of being to open against the suppliers can therefore lead to indirect information sharing to the competitors.¹⁴³

Lack of knowledge of the partners' operations is also one difficulty that can lead to a less prosperous collaboration. These, together with a lack of competence on how to collaborate in a proper way, are hurdles which our respondents emphasized during interviews in terms of collaboration with suppliers.¹⁴⁴

During our interviews, problems concerning money for small companies were emphasized. Small companies do often not have the monetary strength to collaborate since it demands resources and time. 145

5.3.2.1 Analysis of different objectives between other collaborators

It seems like most of the innovation work within the companies we have studied are devoted to the R&D department, this is supported by our web survey result were the respondents have expressed that there often is too little time to innovate since it is not on the daily agenda. This might be correct since the employees working at R&D-departments are hired to develop ideas and working towards improving them, however, there is a risk of missing good solutions and inputs if there is a lack of external input. Employees who are working and operating on a daily basis can have the knowledge to improve products, services and business models, but perhaps they do not always get a chance to do it.

The largest problem linked with having too restrained R&D departments in larger companies is all value they risk to miss, that is an issue which can be solved through collaboration. This is something we believe companies should consider. Being innovative only at a closed R&D department, might be a sign that the company actually do not have a clear strategy considering innovation, or do not know how to create and capture value in the knowledge economy they act in.

In our empiric findings, projects were mentioned as the most common approach to collaborate with partners. Project form could lead to a prosperous collaboration if handled correctly, but there are also problems associated with goal consensus. No matter how one collaborate, a goal consensus is crucial. It must be settled in an early phase so that all parts know what is required from each one linked to the purpose of the collaboration. This can be

_

¹⁴³ Web survey

¹⁴⁴ Ibid.

¹⁴⁵ Interview with Carin Daal

the problem with customer collaboration, which not always leads the company to the frontline of innovation.

5.4. Financial problems

Short term financial instruments were regarded as a problematic area in our collected empiric material, which showed that many of the companies in the Öresund region tend to have a short-term focus on innovations¹⁴⁶. Using short-term financial instruments is something that almost 50 % of the respondents believe can kill innovations.¹⁴⁷ If financial tools are used unwisely they could destroy innovation initiatives, especially if they have a short-term focus, which is why management must be careful in the usage of financial instruments when evaluate potential innovations and innovation projects.¹⁴⁸

Another significant collaborating related barrier to innovation that the web survey respondents emphasized was budget related problems. The Swedish tradition and culture in research differs from other countries such as America. In Sweden, venture capitalists and the companies themselves are often more careful with their funding and are not ready to proceed with innovation projects to the stage where the innovation can be commercialized. This takes expression in some research projects where the research teams have to find other external financiers to be able to proceed with the research. In the US on the other hand, there is a more openness toward proceeding with a research project and provide more money if it is needed. The survey of the stage was provided to provide more money if it is needed.

5.4.1 Analysis of financial problems

Financial instruments and measurements are needed since they are highly useful and necessary in many aspects. The financial measurements are useful for several investments but should be used carefully when measuring innovation projects. We have discussed the impact globalization has on companies today. Since globalization puts pressure on companies to innovate in order to stay competitive, the appropriate measurements must be used to minimize the risk of competitors to gain market shares. If NPF and DCF are used carelessly and factors like; the opportunity cost of not investing is not considered in the evaluation of a potential innovation, a factor which might be parity in the competitive environment in a near future might be missed. ¹⁵¹ Innovation projects take time and can be costly to develop and commercialize. If management only addresses NPF and DCF and

¹⁴⁶ Web survey

¹⁴⁷ Ibid.

¹⁴⁸ Interview with Martin Lindholm

¹⁴⁹ Web survey

¹⁵⁰ Group interview

¹⁵¹ Christensen, Kaufman & Shih, *Innovation Killers – How Financial Tools Destroy Your Capacity to Do New Things* (2008) P.100 - 105

therefore decide to shut down the project, competitors can decide upon a similar innovation and thereby gain future market shares.

Budget related problems are also a common obstacle to get by especially linked to the financial instruments. This takes expression when companies or financiers consider whether or not to fund an innovation project to a stage where the innovation is ready to be commercialized. In collaboration, it is important to find partners which are willing to support the project all the way to commercialization or where the project can be helped to be commercialized or get funding from another part. Therefore it could be a good idea to involve several parts in collaborations for innovation, to avoid that one financier kills an innovation by walking away from the project. The role a as financier of innovations in the first part of the innovation processes as well as in emerging companies are lacking in the Öresund region.

5.5 Summarizing model

The most common collaborative barriers experienced by the respondents in our web survey are listed in the table below. We can in this table see the different barriers depending on what partner the companies chose to work with.

Partner	Barriers			
	 Risk with sharing information 			
Suppliers	• Trust			
	Culture			
	Lack of competence			
Customers	• Trust			
	 Not in frontline of innovation 			
	 Legal issues 			
Universities	Too academic			
	 Too long-term¹⁵² 			

Table 4

_

¹⁵² Web survey

6. Combined regional and corporate analysis

In this chapter the identified problems from chapter 4 and 5 are combined in a matrix, combining the region with corporations.

From our empirical findings we have identified five problematic areas regarding collaboration for innovation. On the horizontal axis in figure 9 below, the five problems which we have found are difficult for corporations and organizations from chapter 4 and 5 are presented. On the vertical side the six issues, which Region Skåne today are working to solve, are shown. Every problematic area represents one standing rectangular area from the title down to the base line of figure 9 below. If all identified issues by Region Skåne, which represents the public sector, are dealt with, this will reduce the companies' region related problems in six ways. As can be seen in the figure below, financial and budget related problems do not have any connection to the public sector issues. These problems must therefore be solved by the companies themselves or in collaboration with other partners, without the public sector. The same applies for the internal bureaucratically process that was mentioned as a barrier for innovation. The corporations' management- and objective problems will partly be solved by the public sector if they manage to solve "lack of a driving and overall co-operating partner" and "...knowledge transfer between academia and private sector". Trust related problems can also be reduced if the public sector solve; "lack of a driving and overall cooperating partner" and "...connecting different actors in the region".

If the public sector succeeds to solve the six issues and the corporations find ways to solve their remaining problems, the Öresund region will have good opportunities to succeed in collaboration for innovation. To identify what problems to deal with is a good first step. Some of the issues could even be dealt with inside the organization such as the correct usage of financial instruments. Trust issues and the problems with different objectives on the other hand are areas which have to be solved through collaboration.

However, when we look at collaboration for innovation in the Öresund region, solving the mentioned problems and issues does not by itself make collaborations more successful. There are other important affecting aspects to consider which will be explained in the next chapter.

Identified regional problems for the public sector to solve

Identified collaborative innovation problems for corporations

	Regional Problems	Management problems	Trust Problems	Different objectives	Financial tools & budget
Lack of industry competence in supporting innovation structure					
Strengthening the support of growth companies and first phase innovation processes					
Lack of efficient structure for knowledge transfer between academia and private sector					
Create a learning innovation system connecting different actors in the region					
Lack of a driving and overall co-operating partner					
Lack of a coordination ability in order to maximize the utility of spread innovation projects					

Figure 9 – Combined Matrix

7. Conclusions

In the last chapter of this thesis the findings and the anticipatory factors of collaboration will be presented. A short discussion on further research will also be presented.

The Öresund region has a big impact on collaboration for innovation. The region is the platform which companies acts upon and is a solid ground with high potential for collaborative innovations.

However, it is not until all actors in the Öresund region have identified their supporting networks and actually play their role in the value network of Öresund, which the ultimate teams will arise, the collaborative advantages are discovered and the Blue Oceans can be created, for both corporations as well as the region from a global perspective.

We have in this thesis identified the difficulties of collaboration for innovation in the Öresund region and found regional and corporate related factors which have an impact on collaboration for innovation in the Öresund region. These are;

- The lack of exchanging ideas with its origin in **trust**, (see 5.2).
- The lack of trust which has its origin in the regions different **cultures**. Both its **corporate cultures** and the different **countries**' **cultures**, (see 4.2.4).
- The lack of meeting places in the region which in turn has impeded supporting networks and key roles for collaboration to arise, (see 4.2.1 & 5.2.1).
- Lack of supportive roles and networks have created difficulties to find financiers and common objectives for new innovations, (see 4.2.3 & 5.4).
 - o Start-up and emerging companies have difficulties in finding venture capital and funding from the public sector
 - Larger companies tend to have short-term financial tools and processes which impedes long-term innovation projects

The most common collaborative partners for companies are customers and suppliers, while most innovations occur in internal R&D units. However, since companies are collaborating with partners there should be great potential for more collaborations leading to more innovations. These collaborative innovations should lower the time-to-market since these kinds of collaborations are satisfying a direct need. The final product should meet a direct market demand with several actors' contributions which in turn should lower the costs and risks.

All involved organizations in the Öresund region together create a large value network. Looking at the Öresund region through a value network perspective, all organizations play an important role in this network. These roles together with supporting networks have to be identified. What actor who plays what role must be identified and developed in order to make the transitions in the innovation processes smooth. It may seem like Region Skåne today, by identifying and solving the six issues, shown in figure 9, have taken the role as a coordinator. The other important roles must also be identified which the meeting places could help with.

We have found that: "cultural", "trust" and "different objectives" are the most common constraints of collaborative innovations. A reason for this could be that many organizations have not identified their roles in the Value Network System – the Öresund region. The anticipatory reason behind these obstacles in the Öresund region can be the lack of meeting-places for the different actors in the region. From a corporate perspective, "management issues" as well as the "budget & financial problems" concerning innovation and collaboration can be solved on an operational level in each and every company individually.

However, the other critical factors, such as "different objectives", "culture barriers" and "trust", are factors which both the private sector and the public sector experience and therefore have to be solved together. As can be seen in green text in figure 10, several problems are linked together and therefore making them more complex.

The five identified main problems which corporations experience have a negative impact on collaboration in the region. These can be classified into two types of problems: Process- and Structural problems.

The process problems are:

- Management
- Financial tools & Budget
- Trust
- Different Objectives

Whereas, the structural problems consist of: diverse corporate cultures within the different kind of organizations in the region and the two country's different cultures.

The problems, which cannot be solved individually by the organizations, have its origin in two types of weaknesses in the Öresund region. We would argue that the first weakness is that it has been too much focus on organizations in particular which have triggered cooperation rather than collaboration. The second weakness is the weak supply of meeting-places. By solving the second problem i.e. creating more meeting-places, the predominant focus on organizations can be changed as well. If people from various organizations meet

and get to know each other, the focus will change from "organization" to "people". When the focus change from organizations to people, trust can be built, cultural barriers descended and most important the identification of key-roles and supportive networks can be accomplished. These issues are crucial in order to smooth the transitions in innovation processes. This connection is expressed by the double sided arrow between the green text in the matrix below.

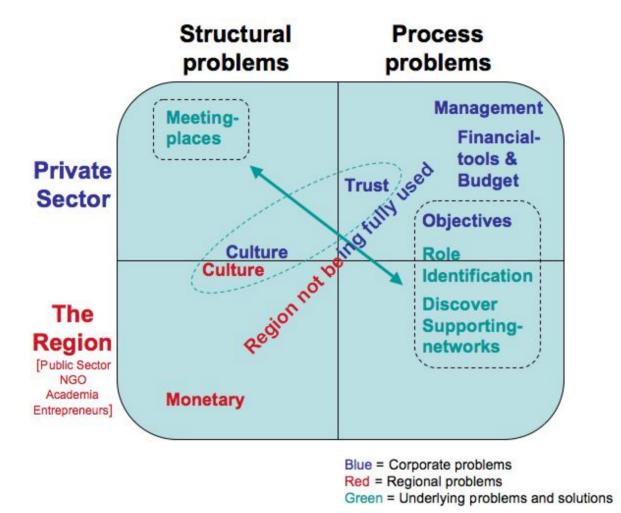


Figure 10 - The problems

When looking at collaboration models today such as the Triple helix, Quad helix or even Penta helix, the "collaboration-" part is missing. "Collaboration does not happen by itself", as Verna Allee expressed in our interview. The meeting-places are therefore vital in order for not only co-operation to occur but also genuine collaborations.

To finally conclude the thesis, the focus in the Öresund region has to be on the roles and not only the organizations to trigger collaboration and create easier transitions in the innovation processes.

To illustrate this we have created a model based on the helix thinking, where we have added what we call "the social arena" and replaced the "enthusiasts" with what we define as the

"Actors". This, since it does not always requires a highly driven person in order for an innovation process to continue. Hence, each innovation process is unique and requires different roles in different phases of the process. To quote Verna Allee: "The role itself doesn't care who plays it" and further on it change from time to time and differs from one process to another.

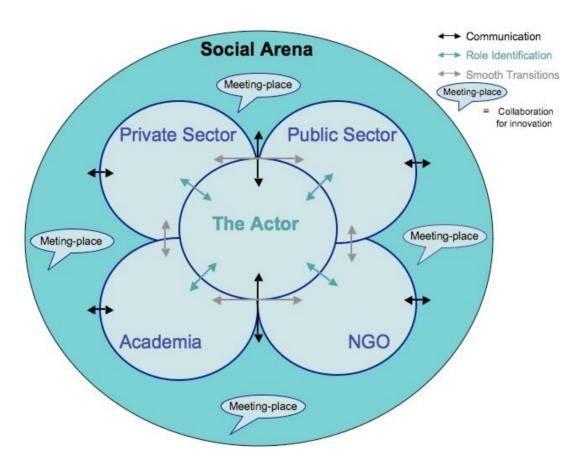


Figure 11 - Collaboration-Helix Model

The collaboration-Helix Model (figure 11) can be explained with help of a theater metaphor, where the Öresund Region is the "social arena" consisting of the "Audience" i.e. everyone and all organizations in the region. The arena, today lacks but should have, various "scenes", i.e. meeting-places both physical and virtual, where the "acts" can take place. The actors/actresses represent the role-incumbents required for the play to be performed, i.e. the collaborative innovation process to be accomplished. The "backstage crew" represents the supportive networks which support the collaboration and the conductor is an initiator.

This is not a "regular production" instead the actors, conductors and performances change when there is a transition from one phase to another in the innovation process.

The Öresund region has a full-packed arena, with devoted supporters, but lacks the "stages" for the performances to take place. The first step towards a more collaborative region is thus to gather the "actors "and the "Backstage-crew" for the first play.

The question is then who will take the role as the stage builder in order to build the scenes?

- Let the play begin!

7.1 Further Research

After conducting this thesis we have found a number of interesting subjects for further research. The regional aspect on the innovation system is something that further research can be based on and especially the benefits if ESS will be place in Lund. Who will gain from the ESS and how will the ESS benefit the region?

We also leave room for other researchers to study the importance of IT as a support of collaboration. What kind of IT-support is needed in order to have a successful collaboration and how does IT-support affect collaboration?

Another aspect that can be a subject for further research is how our collaboration difficulties can be solved by looking more into different collaboration approaches. Is there a solution to the collaboration difficulties we have identified between companies and its partners such as the academia?

8. References

Published Material

- Alvesson, Mats; Sköldberg, Kaj (1994) Tolkning och reflektion, Studentlitteratur, 1:a Upplagan
- Bryman, Alan; Bell, Emma (2005) Företagsekonomiska forskningsmetoder, Liber ekonomi, First Edition
- Capgemini (2008) Collaborating for innovation
- Edvinsson. The hidden values UNIC IC value system.
- Etzkowitz, Henry (2005) *Trippelhelix Den nya Innovationsmodellen, Högskola, Näringsliv och myndigheter I samverkan*, SNS Förlag, Stockholm, Första upplagan
- Florida, L Richard (2005) *The Flight of the Creative Class The New Global Competition for Talent*, Harper Collins Publisher, New York. First Edition
- Hallencreutz, Daniel; Bjerkesjö, Peter INTERSECTA AB; Daal, Carin Region Skåne
 (2008) Skånes regional innovationssystem- En funktionsanalys.
- Hamel, Gary (2007) *The future of management*, Harvard business school press, Boston Massachusetts.
- Johansson, Frans. (2004) *The Medici Effect- break through insights at the intersection of ideas, concepts, and culture,* Harvard business school press, Boston Massachusetts
- PwC (2005) *Cities of the Future Global Competition, Local Leadership.* PricewaterhouseCoopers, New York, NY.
- Visionären. Tidning för kommuner, landsting och trossamfund (2005)

Articles

- Allee, Verna (2001) *The new business and knowledge management fundamentals,* "New Business Fundamentals", Perspectives Newsletter
- Allee, Verna; Taug, Jan (2006) *Collaboration, innovation, and value creation in a global telecom,* The Learning Organization
- Amidon, M Debra (1996) *The challenge of fifth generation R&D,* Research Technology Management
- Christensen, M Clayton; Kaufman, P Stephen; Shih, C Willy (2008) Innovation Killers: How financial tools can destroy your capacity to do new things, Harvard Business Review
- Edvinsson, Leif (2006) Aspects of a City as a Knowledge Tool, Journal of knowledge management
- Etzkowitz, Henry; Leyesdorff, Loet (2000) The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university industry government relations, Research policy
- Hofstede. (1983) *Cultural dimensions project management*, Vol 1 Cultural dimensions for Project management
- Kim, W Chan; Mauborgne, Renée (2004) Blue ocean Strategy, Harvard Business Review

- Kin Han, Chang (2009) *Impact of Intellectual Capital on Organizational Performance*, The Learning Organization
- Lawrence, Owen; Goldwasser, Charles; Choate, Kristi; Blitz, Amy (2008) *Collaborative innovation throughout the extended enterprise*, Strategy and Leadership
- Pisano, P Gary; Verganti, Roberto (2008) Which kind of collaboration is right for you, Harvard Business Review
- Von Stamm, Bettina (2004) *Collaboration with other firms and customers:* innovation's secret weapon, Strategy and Leadership

Electronic Sources

- E24 Entreprenör, www.e24.se
- Ekot, www.sr.se
- Lunds Kommun, www.lund.se/
- Medicon Valley, www.mediconvalley.com
- Region Skåne, www.skane.se
- Skånetrafiken, www.skanetrafiken.se
- Statistiska Centralbyrån, www.scb.se
- The Innovation Superhighway: Harnessing Intellectual Capital for Collaborative Advantage, www.entovation.com
- Value Networks, www.vernaallee.com
- Visionären Tidning för kommuner, landsting och trossamfund, www.pwc.com
- Öresund Social Innovation Zone, www.socialekonomiskane.se
- Öresundsbloggen, oresund.blogspot.com
- Öresundsregionen, www.oresundsregion.org
- Öreundsregionen (2009) The Human Capital of Scandinavia, www.oresundskomiteen.dk

Interviews/Meetings/Lectures

- Verna Allee, President of Value Networks, LLC and ValueNetworks.com
- Evy Lundgren Åkerlund, Business Coordinator, Lund Bio incubator
- Micael Gustafsson, CEO, Öresund IT
- Bodil Rosvall Jönsson, CEO, MINC
- Carin Daal, Business Development Manager, Region Skåne
- Martin Lindholm, Responsible for New Technologies, E.ON Climate and Renewables
- Innovationskraft Skåne
- Leif Edvinsson, Lecture Lunds University

Our knowledge journey

Looking back on this knowledge journey, we have not only been educated in collaboration for innovation in the Öresund Region but also learned the process of studying a complex subject. The first "wake-up call" we had was the difference of collaboration and co-operation which many companies today seem to use as synonyms.

Collaboration for innovation has been shown to be a rather complex subject with multiple interesting aspects to study. The process of writing this thesis have given us the experience of being able to change direction and being able to critically choose what fields to focus on and which not to. During this knowledge journey we have met and talked with interesting people whom have presented ideas and perspectives on collaboration for innovation.

By being in contact with different people from a variety of sectors and organizations, we have been able to complement and strengthen our material which has improved our result. After working with the material for nine weeks, we have understood the importance of letting an external part read through the material and critically study it. When working with a project like this thesis one gets blinded by the material and one is of great need of input from external parts which in our case were our fellow students.

Further on, we have learned to work closer in a group and to collaborate. While executing this study we have been collaborating and together generated ideas and thoughts which have resulted in this thesis. To have different ideas and opinions in the group have made the process more dynamic and it has constantly triggered the group to critically thinking.

We have learned that collaboration is a key for successful innovations. At first, we did not realize the importance of looking at collaboration in a wider sense and taking regional aspects into consideration. Rather early we understood that the company respondents believed that collaboration is crucial but still, they seem not to be collaborating in a wider sense and are today still co-operating. Today we know and understand that collaboration for innovation depends on the supporting networks and the key roles which have to be taken, rather than what kind of organizations which should innovate together.

The outcome of this ten-week process has not only been our master thesis, we do now possess greater knowledge of the Öresund region, how organizations look upon innovation and how they work with it. This thesis will be a foundation for a report for Cappemini on how to solve the collaboration related problems we have identified and gives us the opportunity to further broaden our perspective within this field.

Finally we would like say that this has been a highly interesting and useful but demanding experience which have taught us lot and prepared us for future group work.

Interview guide. Collaboration for innovation interview with Martin Lindholm, EON Climate and Renewables

Background

- o Name
- Title

Organization

- o structure
 - flat
 - Hieratical
 - Matrix
- Support for innovation
 - culture
- It-support –how does it work and how well does it support innovation processes within the company?

Innovation

- o Where does most innovation occur within the company?
- o What is the most common innovation? Business model, product, service?
- o What is your time to market for your innovations?
- What is your most common problem regarding innovation? What is the greatest challenge?

Collaboration for innovation (for you and in general)

- o Do you collaborate for innovation?
- o How well do you collaborate for innovation?
- o How do you collaborate for innovation?
- o Why do you collaborate for innovation?
- Who do you collaborate with?
 - Big/small companies
 - Universities
 - NGO's
 - Etc
- o How do the above mentioned collaborations function?
- What are the differences in the collaborations between the different partners?
- o What are you looking for in your collaborative partners?
 - Complementing competence (skills, service experience, etc)
 - Bigger network
 - New groups of customers Annan
 - Other industry which have not been reached before
- How do you choose your collaborative partners?

- Screening processes
- connections
- conferences
- other ways
- o What can collaborative give you which you cannot do alone?
- Difficulties?
 - Different goals
 - Different level of risks and costs
 - Corporate secrets which cannot be shared with others
 - Poor knowledge in your partners field
 - Part of potential profit from the innovation
- o Advantages?
 - What can you achieve which cannot be achieved alone?
 - Shared risks and costs?
 - Shorter time to market?
 - Easier to meet customer need
 - other
- o What do you learn from collaboration?
 - New technology and service
 - Experience for new collaborations
 - Meeting new customers and segments
- o Who takes initiatives to collaborate for innovations, you or other companies?
- o Who takes decisions to find collaborative innovation partners?
- o How do you believe that E.ON differ itself in collaboration for innovation compared to other companies?
- o Other thought about collaboration for innovation?

Interview guide, Region Skåne, Carin Daal, 2009-05-08

- Short presentation about us and what we do
- Background
 - o Name
 - o Title
- The Öresund region
 - o Öresund Vs. Copenhagen
 - o Region Skåne
 - Do they stimulate innovations and collaboration for innovation?
 - Why?
 - o Companies and their collaborations
 - "What impact has the Öresund region on companies' ability to collaboration for innovation?"
 - o culture
 - o Triple Helix Penta Helix
- Network mapping
 - o Difficulties with collaboration for innovation

Group interview 2009-12.05 – Collaboration for innovation

Innovation

- o What is innovation, definition?
- o How do you look at innovation?
- o How does innovation occur?

Collaboration

- What is your point of view on collaboration for innovation?
 Advantage/disadvantage
- Is there a difference depending on what collaborative partners one chooses?Who are these partners?
- o In what way do you collaborate??
- o Examples of successful collaborations and why these have been successful?
- Is it enough that companies are closely located to be able to collaborate for innovations or does it require stronger integrations such as same buildings or shared IT-structure?
- o What are the most important ingredients in an innovative collaboration, what cannot collaborations be without?
- o How shall management and leadership be organized to reach the ultimate result? Shared between the organizations or only be represented by the leading company?
- What can be done to make collaborations between the private sector and academia be simplified and improved?
- Does the size of a company have an impact on the choice of a collaborative innovation partner?

Difficulties concerning Collaboration

- o Goal congruence?
- o Different cultures?
- o Risk taking?
- o What difficulties have you identified?
- o How can these difficulties be managed?

Region

- Could a region such as the Öresund region affect the collaborative opportunities between Universities and companies?
- What can be done better on a regional level in order to stimulate collaboration and collaboration for innovation?
- Who are leading within collaboration for innovation and what organizations or companies stimulates collaboration?
- What efforts can be done in order to get companies in the Öresund region to be really good in collaborating and innovating?
- Are there any factors in the Öresund region which has an impact on companies' ability to innovate?

Companies that are represented in our web survey:

- Aarhus Karlshamn
- Active Biotech
- Alfa Laval
- Allers Förlag
- Anoto
- Arjo
- Arla Foods
- ARM
- Assa Abloy
- Astra Zeneca
- Axis
- Bring Frigoscandia
- Brio
- Capgemini
- Cardo
- Cerdo
- Connect Blue
- Copenhagen Airport
- Danske Bank
- Duni
- E.ON
- Egmont
- Ericsson
- Ferring
- Findus

- Foss
- Gambro
- Haldex
- Höganäs
- Leo Pharma
- Man BW
- Metso
- Nationalencyklopedin
- NDS
- Nedermans
- Nordea
- Pfa Pension
- Post Danmark
- Procordia
- Rockwool
- Scan Coin
- Skånemejerier
- Sony Ericsson
- SOS International
- ST-Ericsson
- Sydsvenskan
- TAC
- Trelleborg
- Unilever

Banking industry

Web survey- collaboration for innovation

1. Which of the followir	g best defines	your compan	y's industr	y category?
--------------------------	----------------	-------------	-------------	-------------

Energy industry
Pharmaceutical industry
Engineering industry
Food processing industry
IT/Telecom industry
Insurance industry
Other, which?
2. Where are you located?
Sweden
Denmark
3. What revenue did your company report in the last fiscal year?
Less than 10 MEUR
10 - 25 MEUR
25 - 50 MEUR
50 - 100 MEUR
100 - 150 MEUR
150 - 200 MEUR
150 - 200 MEUR More than 200 MEUR

4. How is your organizational structure most easily described?

Cross-functional/Matrix

Flat

5. How do you rate the executive-level sponsorship and support for Innovation projects in your company?
"Innovation - The introduction of new things, ideas or ways of doing something"
Superior / Excellent
Better / Good
Lagging / Unsatisfactory
Inferior / Poor
We do not / It does not
6. How important are;
Innovation initiatives from members within your organization?
Innovation for survival in your industry?
Collaboration with others for Innovation?
Collaboration in order to meet Competition?
Very Important
Important
Somewhat
Important
Not
Important
7. Is there a reward system for Innovation initiatives in your company?
Yes
No

8. Which of the following functional areas is the primary driver of Innovation for your company? Please select all that apply

If yes, how does your company reward innovation initiatives?

Do not know

Sales & Marketing
Research & Development
Product Management
Manufacturing
General Management
Service
Information Technology
Finance
Customer
Purchasing
Logistics & Supply Chain
Do not know
9. In which of the following functional areas does Innovation most often occur?
Sales & Marketing
Research & Development
Product Management
Manufacturing
General Management
Service
Information Technology
Finance
Finance Customer
Customer
Customer Purchasing
Customer Purchasing Logistics & Supply Chain

10. What type of Innovation is most common for your company?

Product Innovation - New and/or improved products

Service Innovation - New and/or improved services
Business Model - New and/or improved ways of creating value
Do not know
What is the biggest barrier for Innovation for your company?
11. Do you have any knowledge/opinion about your company's time-to-market for innovations?
Yes
No
12. Your Time-To-Market for Innovations
In average?
shortest?
longest?
0 – 6 months
6 – 12 months
12 – 18 months
18 – 24 months
24 – 30 months
30 – 36 months
> 36 months
Do not know
13. How would you rate your company in:
Generating new ideas?
Developing new ideas into products/services?
Improving existing products/services?
Superior /Excellent
Better /Good
Lagging /Unsatisfactory
Inferior /Poor

14. How do you Collaborate for Innovation within your company?

15. On which type of Innovation do you Collaborate the most?
Product Innovation - New and/or improved products
Service Innovation - New and/or improved services
Business Model - New and/or improved ways of creating value
Do not know
Other
If other, please specify
16. Where in your company is Collaboration for Innovation most important?
Sales & Marketing
Research & Development
Product Management
Manufacturing
General Management
Service
Information Technology
Finance
Customer
Purchasing
Logistics & Supply Chain
Do not know
Others

Yes

No

Do not know

18. How many (partners, cust., univ, etc) does your company generally collaborate with?
1 - 3
4 - 6
7 - 9
> 10
We do not collaborate
Do not know
19. What kinds of parties does your company Collaborate with? Please select all that apply
Suppliers
Customers
Logistics partners
Financial partners
Competitors
Researchers/Universities
Do not know
Other
If other, which?
20. How do you search for parties to Collaborate with?
Journals
Internet
Networks
Through business
Do not know
Other
If other, how?

21. Who is taking the initiative to Collaboration within you company? Please select all that apply

21. Who is taking the initiative to collaboration within you company: Flease select all that appr
Sales & Marketing
Research & Development
Product Management
Manufacturing
General Management
Service
Information Technology
Finance
Customer
Purchasing
Logistics & Supply Chain
Do not know
Other
22. What are the sizes of the companies that you Collaborate with? Please select all that apply
Micro companies
Small-sized companies
Medium-sized companies
Large-sized companies
Do not know
23. How do you Collaborate for Innovation with;
Suppliers?
Customers?
Governments?
Banks?
Distributors?
NGO's?
University?

Others?

24. How would you rate each of the following motives for your company's Collaboration?
Improving our product innovation
Providing access to new markets
Accelerating our time to market
Improving our product quality
Reducing our product costs
Superior /Excellent
Better /Good
Lagging /Unsatisfactory
Inferior /Poor
Do not know
25. What percentage of new products introduced over the past three years originated from ideas that spurred from partnerships with external parties?
Less than 10 %/ 10 - 19 %/ 20 - 29 %/ 30 - 39 %/ 40 - 49 %/ more than 50 %/ Do not know
Suppliers
Customers
Governments
Banks
Distributors
NGO's
Universities
Others

26. How would you rate your company's IT support for Collaboration for Innovation?

If others, please specify

Using social-networking tools (blogs, video, communities)?
Using technological tools (video conferences, computer applications)?
Other?
If other, please specify?
Superior /Excellent
Better /Good
Lagging /Unsatisfactory
Inferior /Poor
We do not / It does not
27. How well does your company's IT support Collaboration for Innovation with;
Suppliers?
Customers?
Governments?
Banks?
Distributors?
NGO's?
Universities?
Others?
Do not know
Superior /Excellent
Better /Good
Lagging /Unsatisfactory
Inferior /Poor
We do not / It does not
28. How would you rate your company's ability to integrate new innovations in the IT-system?
We do not / It does not
To employees?

To existing supplier channels?

Regarding support to
Customers?
To other external partners?
Superior /Excellent
Better /Good
Lagging /Unsatisfactory
Inferior /Poor
29. What are the most significant Collaboration related barriers to Innovations facing your company,
Regarding;
Suppliers?
Customers?
Governments?
Banks?
Distributors?
NGO's?
Universities?
Others?
30. Overall, how effective is your company at involving parties in your Innovation process?
Suppliers?
Customers?
Governments?
Banks?
Distributors?
NGO's?
Universities?
Others?
Superior/Excellent

Bette /Good
Lagging/Unsatisfactory
Inferior /Poor
Do not know
31. How well is your company able to predict and capitalize on your customer's unmet needs?
Superior / Excellent
Better / Good
Lagging / Unsatisfactory
Inferior / Poor
We do not / It does not
Do not know
32. Do you think Collaboration is more important in the Öresund region than in any other geographic locations of your company?
Yes
No
33. How well does your company use Open Innovation environments to Collaborate?
"Open Innovation - The use of purposive inflows and outflows of knowledge with external partners to accelerate innovation"
Suppliers?
Customers?
Governments?
Banks?
Distributors?
NGO's?
Universities?
Others?
Superior /Excellent
Better /Good
Lagging /Unsatisfactory

Inferior /Poor
We do not / It does not
Do not know
Are there any general issues in using Open Innovation?
34. Do you consider your company being a part of an Innovation Network?
"Innovation Network - Sharing, planning and evaluating tools and know-how with external partners"
Yes
No
Do not know
If Yes, which network?
35. How great importance has globalization on your company's Innovation effort?
Very Important
Important
Somewhat Important
Not Important
Do not know
36. Do you have any knowledge/opinion about your company's Evaluation Process of Innovations?
Yes
No
37. How does your company select Innovations?
Screening process
Board or other executives
Do not know
Other
If other, please specify

38. How well does your company "measure" the following aspects of Innovation? Generate of new product / service ideas Selection of new product / service ideas for development Development of new product / service ideas Time to develop goals for new products / services Time to develop goals for changes to existing products / services New product / service sales performance New product / service profitability performance Innovation failures How could your measurement be improved? Superior /Excellent Better /Good Lagging /Unsatisfactory Inferior /Poor We do not /It does not Do not know 39. How much of your annual revenue comes from products/services newer than three years? Less than 10 % 10 - 19 % 20 - 29 % 30 - 39 % 40 - 49 % More than 50 % Do not know 40. Do you believe that short-term financial instruments have a tendency to kill Innovations in your company?

Yes

No
Do not know
41. How does your company handle innovation failures in the following aspects?
We do not / It does not
Evaluating the failures?
Save the innovation failures for further improvement?
What are the main reasons for innovation failure and what are the lessons learned?
Superior /Excellent
Better /Good
Lagging /Unsatisfactory
Inferior /Poor
42. How much return from Innovation is acceptable?
0 %
1 - 3%
4 - 7%
7 - 10%
10 - 15%
More than 15%
Do not know
43. Does your company have any goal on how much of the revenue that should come from new Innovations?
Yes
No
Do not know

44. How much of the annual revenue should be reinvested in your Innovation processes?

1 - 3%

4 - 7%
7 - 10%
10 - 15%
More than 15%
Do not know
45. On what time frame do you see Innovation pay-off?
0 - 6 months
6 - 12 months
12 - 18 months
18 - 24 months
24 - 30 months
30 - 36 months
More than 36 months
Do not know
46. Is Innovation something you believe your company is associated with?
Yes
No